REPORT

OF THE

BOARD OF TRUSTEES OF PUBLIC SCHOOLS

OF THE

DISTRICT OF COLUMBIA

TO THE

COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

1897-98.

BOARD OF TRUSTEES OF PUBLIC SCHOOLS, DISTRICT OF COLUMBIA.

LOCAL COMMITTEES.

Division.	Name.	Term expires.	Address.
First	Job Barnard	Sept. 13, 1899	500 Fifth street nw.
Second	George H. Harries	do	Board of Trade, 1410 G street nw.
Third	James W. Whelpley	do	American Security and Trust Company, 1405 G street nw.
Fourth	David H. Hazen, M. D	do	407 Sixth street sw.
Fifth	Jesse H. Wilson	do	317 Four-and-a-half street nw.
Sixth	Mrs. Miranda B. Tulloch	Oct. 15, 1900	121 B street se.
Seventh and eighth.	Ellis Spear, esq	Oct. 1, 1900	1003 F street nw.
	Rev. Sterling N. Brown	do	2464 Sixth street nw.
Eighth	Thomas H. Wright	Sept. 13, 1899	920 Twentieth street nw.
Ninth	Mrs. Mary C. Terrell	Sept. 13, 1899	326 T street nw.
Tenth	Geo. H. Richardson, M. D	Oct. 1, 1900	309 Eleventh street ne.

OFFICERS OF THE BOARD.

President.—JAMES W. WHELPLEY, 1405 G street nw.
Secretary.—J. G. FALCK, Franklin School.
Superintendent of schools.—W. B. POWELL, A. M., Franklin School.
Superintendent of colored schools.—G. F. T. COOK, A. M., Sumner School.

MEETING OF THE BOARD OF TRUSTEES.

The stated meetings of the Board of Trustees are held on the second Tuesday of each month and on the last Tuesday of June.

STANDING COMMITTEES.

Rules.—Messrs. WRIGHT, BARNARD, HARRIES, SPEAR, Mrs. TULLOCH.

Ways and means.—Messrs. WILSON, HARRIES, WHELPLEY, HAZEN, BROWN.

Buildings and repairs.—Messrs. HARRIES, SPEAR, RICHARDSON, Mrs. TERRELL.

Normal and high schools.—First eight divisions: Messrs. WILSON, BARNARD, HARRIES, WHELPLEY, HAZEN, SPEAR, Mrs. TULLOCH. Ninth, tenth, and eleventh divisions: Messrs. RICHARDSON, BROWN, WRIGHT, Mrs. TERRELL.

Teachers and janitors.—Messrs. BARNARD, WILSON, BROWN, SPEAR, Mrs. TERRELL.

Text-books and studies.—Messrs. HAZEN, WILSON, BARNARD, Mrs. TULLOCH, Mr. WRIGHT.

Penmanship, music, and discipline.—Messrs. BROWN, SPEAR, HAZEN, Mesdames TERRELL, TULLOCH.

Industrial instruction, drawing, and night schools.—Messrs. RICHARDSON, HARRIES, WHELPKEY, SPEAR, BROWN.

Library and report.—Messrs. SPEAR, BARNARD, BROWN, RICHARDSON, Mrs. TULLOCH.

Sanitation.—Mrs. TULLOCH, Messrs. HAZEN, RICHARDSON, BROWN.

Kindergartens.—Mr. BARNARD, Mesdames TULLOCH, TERRELL.

SCHOOL DIRECTORY.

[1898-99.]

FIRST EIGHT DIVISIONS.

SUPERINTENDENT.

W. B. POWELL, Franklin School.

CLERK.

J. G. FALCK, Franklin School.

DIRECTORS OF SPECIAL WORK.

Director of primary work	E. A. Denney (Miss)	808 12th street nw.
Assistant director	M. A. Blandy (Miss)	1002 11th street nw.
Assistant director	E. C. Webster (Miss)	231 Massachusetts avenue ne.
Assistant director	Louise Bartlett (Miss)	214 Delaware avenue ne.
Director of music	A. E. Scammell (Miss)	Chevy Chase, Md.
Director of drawing	S. E. W. Fuller (Mrs.)	2611 Messmore avenue.
Director of manual training	J. A. Chamberlain	626 O street nw.
Director of cooking	E. S. Jacobs (Miss)	1543 9th street nw.
Director of sewing	M. W. Cate (Mrs.)	217 I street nw.
Director of physical culture	Rebecca Stoneroad (Miss)	1330 Wallace place nw.
Librarian	Mina Goetz (Miss)	911 6th street nw.

NORMAL SCHOOL.

Principal, Mrs. I. G. MYERS.

Office, Franklin School; residence, 1101 New Hampshire avenue nw.

HIGH SCHOOLS.

Director, Dr. F. R. LANE.

Office, Central High School; residence, 1437 Q street nw.

Name of building.	Location of building.	Name of principal.
Central high	O street, between 6th and 7th streets nw.	Mr. P. M. Hughes, 318 B street ne.
Eastern high	7th street, between Pennsylvania avenue and C street se.	Mr. H. M. Johnson, Anacostia, D. C.
Western high	35th and T streets nw	Miss E. C. Westcott, 1719 H street nw.
Business high	1st street, between B and C streets nw.	Mr. Allan Davis, 900 11th street se.

FIRST DIVISION.

Supervising principal, Mr. C. S. CLARK.

Office, Dennison School; residence, 1443 W street nw.

Name of building.	Location of building.	Name of principal.
Adams	R street, between 17th street and New Hampshire avenue nw.	Mrs. C. B. Smith, 1522 9th street nw.
Berret	14th and Q streets nw	Miss M. C. McGill, 1447 Q street nw.
Dennison	S street, between 13th and 14th streets nw.	Miss K. E. Rawlings, 3519 Eslin street nw.
Force	Massachusetts avenue, between 17th and 18th streets nw.	Mr. B. W. Murch, 1641 31st nw.
Franklin	13th and K streets nw	Dr. E. G. Kimball, 1204 Massachusetts avenue nw.
Harrison	13th street, between V and W streets nw.	Miss A. L. Sargent, 945 Rhode Island avenue nw.
Phelps	Vermont avenue, between T and U streets nw.	Miss C. L. Garrison, 1822 15th street nw.
Thomson	12th street, between K and L streets nw.	(See Franklin School.)

SECOND DIVISION.

Supervising principal, Mr. N. P. GAGE.

Office, Seaton School; residence, 1126 Fifth street nw.

Abbot	6th street and New York avenue nw	Miss Metella King, 721 Irving street nw.
Eckington	1st and Quincy streets ne	Miss A. A. Chesney, 614 Q street nw.
Henry	P street, between 6th and 7th streets nw.	Miss E. K. Scott, 905 K street nw.
Morse	R and 5th streets nw	Miss E. M. Mott, 1122 5th street nw.
Polk	7th and P streets nw	Miss F. M. Roach, 1002 8th street nw.
Seaton	I street, between 2d and 3d streets nw.	Miss F. L. Hendley, 1216 L street nw.
Twining	3d street, between N and O streets nw.	Miss Adelaide Davis, 425 New Jersey avenue se.
Webster	10th and H streets nw	Miss S. B. Kent, 934 K street nw.

THIRD DIVISION.

Supervising principal, Mr. A. T. STUART.

Office, Wallach School; residence, 16 Fourth street se.

Brent	3d and D streets se	Miss A. L. Grant, 507 East Capitol street.
Carbery	5th street, between D and E streets ne.	Miss M. E. Little, 710 A street ne.
Lenox	5th street and Virginia avenue se	Miss V. L. Nourse, 415 C street se.
McCormick	3d street, between M and N streets se.	Mr. R. R. Riordon, 922 Pennsylvania avenue se.
Maury	B street, between 12th and 13th streets ne.	Miss M. G. Kelly, The Colonial, 15th and H streets nw.
Peabody	5th and C streets ne	Miss M. A. Aukward, 128 D street se.
Peabody Annex	6th street, between B and C streets ne.	Miss J. M. Rawlings, 517 A street se.
Towers	8th and C streets se	Miss N. M. Mack, 624 A street se.
Wallach	D street, between 7th and 8th streets se.	Miss Annie Beers, 117 4th street se.

FOURTH DIVISION.

Supervising principal, Mr. ISAAC FAIRBROTHER.

Office, Jefferson School; residence, 900 B street sw.

Name of building.	Location of building.	Name and principal.
Amidon	6th and F streets sw	Miss A. B. Neumeyer, 417 Tenth street sw.
Bradley	13½ street, between C and D streets sw.	Mr. C. A. Johnson, 2011 S street nw.
Greenleaf	4½ street, between M and N streets sw.	Mr. C. N. Thompson, 1104 12th street nw.
Jefferson	6th and D streets sw	Mr. H. T. A. Lemon, 629 G street sw.
Potomac	12th street, between Md. avenue and E street sw.	Miss M. E. Garrett, 718 B street sw.
Smallwood	I street, between 3d and 4½ streets sw.	Mr. S. E. Kramer, 1315 Q street nw.

FIFTH DIVISION.

Supervising principal, Mr. B. T. JANNEY.

Office, Curtis School; residence, 1671 Thirty-first street nw.

Addison	P street, between 32d and 33d streets nw.	Miss E. L. Godey, 1511 32d street nw.
Corcoran	28th street, between M street and Olive avenue nw.	Miss M. F. Gore, 2104 H street nw.
Curtis	O street, between 32d and 33d streets nw.	Miss E. M. Chase, 300 R street nw.
Fillmore	35th street, between U and V streets nw.	Miss T. C. Roeser, 1314 W street nw.
Grant	G street, between 21st and 22d streets nw.	Mr. S. M. Ryder, 34 Q street ne.
High Street	32d and S streets nw	Miss F. A. Robertson, 1007 24th street nw.
Jackson	U street, between 30th and 31st streets nw.	Mrs. L. A. Bradley, 936 I street nw.
Threlkeld	36th street and Prospect avenue nw	Mr. R. L. Haycock, 3243 Prospect avenue nw.
Toner	24th and F streets nw	Miss Euphemia Macfarlane, 920 16th street nw.
Weightman	23d and M streets nw	Miss F. L. Reeves, 730 22d street nw.

SIXTH DIVISION.

Supervising principal, Mr. W. B. PATTERSON.

Office, Gales School; residence, 38 Q street ne.

Arthur	Arthur place nw	Miss Miranda Steele, 419 3d street nw.
Blair	I street, between 6th and 7th streets ne.	Miss E. F. Goodwin, 1213 K street nw.
Blake	North Capitol street, between K and L streets nw.	Miss M. E. Bond, 818 New Jersey avenue nw.
Gales	1st and G streets nw	Miss K. T. Brown, 635 I street nw.
Hamilton	Bladensburg road, county	Miss E. P. Kirk, 819 R street nw.
Hayes	5th and K streets ne	Miss A. M. Clayton, 1418 9th street nw.
Langdon	Langdon	Miss A. M. Sisson, 440 K street nw.
Madison	10th and G streets ne	Miss H. P. Johnson, 12 Grant place nw.
Pierce	G and 14th streets ne	Miss M. J. Austin, 728 F street ne.
Taylor	7th street, near G street ne	Miss E. C. Dyer, 1702 9th street nw.

SEVENTH DIVISION.

(*County.*)

Supervising principal, Mr. J. R. KEENE.

Office, Monroe School; residence, Brightwood.

Name of building.	Location of building.	Name of principal.
White.		
Brightwood	Brightwood	Mr. W. E. Nalley, Brightwood.
Brookland	Brookland	Mr. C. K. Finckel, 615 Spruce street nw.
Chevy Chase	Connecticut avenue extended	Miss M. E. Given, 1429 Q street nw.
Conduit Road	Conduit road	Miss H. L. Luckel, 1755 L street nw.
Johnson Mount Pleasant	School street, Mount Pleasant	Miss C. G. Brewer, The Stratford, Mount Pleasant.
Monroe	Steuben street, between Brightwood and Sherman avenues nw.	Mr. Horton Simpson, 1760 Q street nw.
Reservoir	Conduit road, near reservoir	Mr. H. W. Draper, 923 H street nw.
Tenley	Tenley	Mr. W. B. Ireland, Tenley.
Woodburn	Riggs and Blair roads	Miss H. E. King, 5th and Morrison streets nw.
Colored.		
Brightwood	Military road	Mr. A. O. Stafford, 1223 W street nw.
Bruce	Marshall street, between Brightwood and Sherman avenues nw.	Dr. E. R. Beckley, 2516 Brightwood avenue nw.
Fort Slocum	Fort Slocum	Mr. R. L. Mitchell, 2213 7th street nw.
Grant Road	Grant road, near Connecticut avenue extended.	Mrs. L. I. Hawkesworth, 1215 17th street nw.
Ivy City	Ivy City	Miss L. E. Waring, 905 U street nw.
Little Falls Road	Little Falls road	Mr. H. W. Freeman, jr., 1222 16th street nw.
Mott	6th and Trumbull streets nw	Dr. W. B. Evans, 1926 12th street nw.
Wilson	Central avenue, between Erie and Superior streets nw.	Mr. F. L. Cardozo, jr., 1341 V street nw.

EIGHTH DIVISION.

(*City and county.*)

Supervising principal, Mr. J. T. FREEMAN.

Office, Tyler School; residence, Kensington, Md.

White.		
Buchanan	E street, between 13th and 14th streets se.	Miss M. M. Dyer, 1702 9th street nw.
Cranch	12th and G streets se	Miss M. J. Peabody, 725 13th street se.
Tyler	11th street, between G and I streets se.	Miss S. A. Langley, 311 6th street se.
Benning	Benning	Mr. J. H. Voorhees, Benning.
Congress Heights	Congress Heights	Mr. H. F. Lowe, Falls Church, Va.
Good Hope	Good Hope	Miss J. M. Walling, 636 Q street nw.
Van Buren and annex.	Anacostia	Mr. S. M. Ely, 221 E street nw.
Twining City	Twining City	Miss A. R. Williamson, 711 Massachusetts avenue ne.
Colored.		
Benning Road	Near Benning	Mr. J. E. Syphax, 1631 L street nw.
Birney Hillsdale	Howard avenue, Hillsdale	Miss F. J. Smith, 1524 Pierce place nw.
Burrville	Burrville	Mr. H. W. Lewis, 1115 Q street ne.
Garfield	Garfield	Dr. F. J. Cardozo, 301 2d street sw.

NINTH, TENTH AND ELEVENTH DIVISIONS (*Colored*).

SUPERINTENDENT.

G. F. T. COOK, Sumner School.

CLERK.

J. W. F. SMITH, Sumner School.

DIRECTORS OF SPECIAL WORK.

Director of primary work .....E. F. G. Merritt (Miss).....1109 I street nw.
Assistant director of primary work .N. T. Jackson (Miss) .....318 M street nw.
Music .....A. S. Davis (Mrs.) .....1320 T street nw.
Director of drawing .....T. W. Hunster .....1476 Kenesaw avenue.
Director of manual training .....J. H. Hill .....227 Wilson street nw.
Director of cooking .....M. B. Cook (Miss) .....215 Prince street, Alexandria, Va.
Director of sewing .....C. E. Syphax (Miss).....1447 Pierce place nw.
Director of physical culture.....H. B. George (Miss).....619 B street ne.

HIGH AND NORMAL SCHOOLS.

Name of building.	Location of building.	Name of principal.
Normal school	Miner school, Seventeenth and Madison streets nw.	Miss L. E. Moten, 728 Fourth street nw.
High school	M street, between First street and New Jersey avenue nw.	Dr. W. S. Montgomery, 1912 Eleventh street nw.

NINTH DIVISION.

Supervising principal, Mr. H. P. MONTGOMERY.

Office, Sumner School; residence, 1928 Eleventh street nw.

Briggs.....	E and Twenty-second streets nw	Mr. F. L. Cardozo, 1323 V street nw.
Garrison.....	Twelfth street, between R and S streets nw.	Miss K. U. Alexander, 1512 Pierce place nw.
Magruder	M street, between Sixteenth and Seventeenth streets nw.	Miss A. M. Mason, 2218 I street nw.
Phillips.....	N street, between Twenty-seventh and Twenty-eighth streets nw.	Miss G. F. Smith, 1613 Madison street nw.
Stevens.....	Twenty-first street, between K and L streets nw.	Mr. J. B. Clark, 1633 Eleventh street nw.
Sumner	M and Seventeenth streets nw.....	Miss M. E. Gibbs, 1741 20th street nw.
Wormley	Prospect street, between Thirty-third and thirty-fourth streets nw.	Miss A. T. Howard, 2209 Fourteenth street nw.

TENTH DIVISION.

Supervising principal, Dr. J. H. N. WARING.

Office, John F. Cook School; residence, 1932 Eleventh street nw.

Banneker.....	3d street, between K and L streets nw.	Mr. J. W. Cromwell, 1439 Pierce place nw.
Douglass	1st and Pierce streets nw.....	Miss H. A. Hebbron, 1137 24th street nw.
Garnet.....	U and 10th streets nw	Miss Lucinda Cook, 2224 6th street nw.
John F. Cook	O street, between 4th and 5th streets nw.	Miss S. C. Lewis, 1120 19th street nw.
Jones.....	L and 1st streets nw.....	Miss K. C. Lewis, 1823 Vermont avenue.
Logan	3d and G streets ne.....	Mr. J. C. Nalle, 1429 Pierce place nw.
Patterson.....	Vermont avenue, near U street nw..	Miss C. A. Patterson, 1532 15th street nw.
Slater.....	P street, between North Capitol and 1st streets nw.	Miss E. A. Chase, 1109 I street nw.

ELEVENTH DIVISION.

Supervising principal, Mr. E. W. Brown.

Office, Lincoln School; residence, 924 Twenty-fourth street nw.

Name of building.	Location of building.	Name of principal.
Ambush	L street, between 6th and 7th streets sw.	Miss A. S. Bailey, 421 8th street sw.
Anthony Bowen	9th and E streets sw	Miss J. C. Grant, 1448 Pierce place nw.
Bell	1st street, between B and C streets sw.	Miss L. F. A. Dyson, 101 7th street se.
Giddings	G street, between 3d and 4th streets se.	Miss L. A. Smith, 903 U street nw.
Lincoln	2d and C streets se	Miss M. P. Shadd, 2110 14th street nw.
Lovejoy	12th and D streets ne	Mr. M. G. Lucas, Anacostia, D. C.
Payne	15th and C streets se	Miss R. T. Baldwin, 1234 4th street nw.
Randall	1st and I streets sw	Miss M. E. Tucker, 413 B street se.

REPORT OF THE BOARD OF TRUSTEES OF PUBLIC SCHOOLS.

WASHINGTON, D. C., *December 13, 1898.*

The Board of Trustees of public schools of the District of Columbia transmit herewith the reports of the superintendents together with the report of the director of high schools, and those of the supervising principals and heads of departments of special instruction.

These reports are so comprehensive and full that we need not enlarge upon them. We commend them to the earnest consideration of the honorable Commissioners and of the citizens of the District. We commend also to the good opinion of the Government and people of the District the superintendents and other officers and the teachers of the schools. We do not believe that a more competent, faithful, or laborious class of public servants can be found. Their days are longer, their labor more exhausting of nervous force, their work more exacting and important, their responsibilities greater, and their pay less than that of any other class of public officers of this District. We fear that the importance of their work is imperfectly appreciated.

If the foundation of our institutions rests upon good and intelligent citizenship, and if the object of governmental support and direction of these schools be based on this principle of self-preservation, the training of the children (the people of the next generation) to be intelligent and worthy citizens, the work of these teachers and school officials can hardly be overestimated. It deserves more pay and more attention and appreciation from the people, and especially from the patrons of the schools. With rare exceptions, the people of this community are never heard from in the matter of the public schools, unless they wish children transferred from one school to another, or have some complaint to make.

We must, however, recognize the earnest and effectual effort made by some public-spirited citizens in aid of the establishment of kindergarten schools.

The appropriation made by Congress at its last session for this purpose has enabled the superintendents to establish and set in successful operation 16 schools of this class. The appropriation was sufficient only for the appointment of 16 teachers and for the accommodation and instruction of only about 500 scholars. But the results are satisfactory and promising, and from this small beginning we hope to see this branch of instruction grow to proportions worthy of the capital city.

The response made by Congress, at the last session, to our appeal for increased facilities for manual training was very gratifying.

The site selected for the manual-training high school is entirely satisfactory, although the cost exceeded the original estimate. We believe that the best has been done in this matter that could be done under the circumstances. In considering the plans for the building to be erected thereon new conditions present themselves.

Unexpected increase in the number of manual-training students, whose academic work is done in the Central high school building, threatens, in the near future, to overcrowd that building. Indeed, some of the departments are now full. This increased interest in manual training will be further stimulated, doubtless, by the proposed increase of facilities. It is now estimated that by the time the new building is ready for use 350 students in manual training will be ready to enter it.

If the academic work of the ordinary proportion of these students is done in the Central high school it will be at once filled and perhaps overcrowded. It seems wise, therefore, if not actually necessary, that the manual-training building should be sufficient to accommodate the manual-training scholars in all the branches pursued by them, so that the school would be independent, and both the academic and the manual training would all be carried on within its walls. This would be more convenient and would also bring relief to the Central high school building.

This will then bring the manual-training high school abreast of the three literary high schools and the one business high school, which are distinct and complete in themselves.

These conditions, and the sum larger than estimated necessarily paid for the site, render the appropriation for site and building insufficient, and will compel the trustees to ask for more. As has heretofore been shown, many cities in the country have buildings for this kind of school work of much greater extent and cost than any ever contemplated by the board. It seems to the board in the highest degree desirable—it seems in fact necessary—for the interests of the schools, that a building for manual-training high school should be planned on a larger scale than originally contemplated. Of the $150,000 originally asked for, for building and site, $125,000 was determined upon by Congress. The estimate for site was then $30,000, which would have left in the estimate $120,000 for the building. The increased cost of the site leaves, however, only $77,000 for the building. This would be inadequate for the needs already in view, and unworthy of the position of the city of Washington.

There is a gratifying prospect of an assistant to the superintendent. How it could ever have been supposed that one man, unassisted, could have even the most general supervision over more than 800 schools, including in all (day and night) over 45,000 scholars, and the expenditure

of more than a million of dollars annually, passes comprehension. Aside from salaries of teachers and costs of buildings, the appropriation for the current year includes over $200,000 for such items as fuel, plumbing, repairing, furniture, text-books, rent for buildings, etc. For the judicious and careful expenditure of all this large sum there should be some official who could give it almost his exclusive attention. The superintendent, occupied in scholastic concerns, should be relieved from these business matters, and this can be done when an assistant is provided. Even under such conditions the salary of the superintendent is insufficient, whether the position, the work, the responsibility, or the man be considered.

The work done in the manual-training department during the past year has been highly gratifying, and we commend the teachers of the schools for increased recognition.

The board is always compelled to urge the provision of more school room. The city and the county constantly increase in population, and not evenly, but in localities. We especially ask attention to the report of the superintendent in this particular.

The condition of the school buildings is good, and the business of repairs has been conducted in a satisfactory manner.

J. W. WHELPLEY,
President, Board of Trustees.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

REPORT OF SUPERINTENDENT W. B. POWELL.

GENTLEMEN: I have the honor to present herewith, for the year ending June 30, 1898, a report of the management and present condition of the schools of the first eight divisions, and a consolidated statement of the attendance and other important items relating to all the schools under your charge. The last-named statement has been made by uniting facts presented by Superintendent Cook with those of like kind found in my report, being given here for your convenience in getting a general view.

Number of pupils enrolled:	
First eight divisions	31,723
Ninth, tenth, and eleventh divisions (colored, city)	12,975
Total	44,698
Number of white pupils (male, 14,257; female, 15,054)	29,311
Number of colored pupils (male, 6,883; female, 8,504)	15,387
Total (male, 21,140; female, 23,558)	44,698
Number of pupils in city schools (white, 25,810; colored, 12,975)	38,785
Number of pupils in county schools (white, 3,501; colored, 2,412)	5,913
Total (white, 29,311; colored, 15,387)	44,698
Number of male pupils (white, 14,257; colored, 6,883)	21,140
Number of female pupils (white, 15,054; colored, 8,504)	23,558
Total	44,698

	Male.	Female.	Total.
Number of pupils in normal schools	14	141	155
Number of pupils in high schools	1,293	1,823	3,116
Number of pupils in grades below the high schools	19,833	21,594	41,427
Total	21,140	23,558	44,698

Per cent of teachers.

	Per cent.		Per cent.
White	66.8	Male	13.37
Colored	33.2	Female	86.63

ENROLLMENT.

The number of pupils enrolled was 44,698—29,311 white and 15,387 colored. This shows an increase of 1,703, or 3.96 per cent over the enrollment of the previous year.

The average enrollment was 36,821, or 3.19 per cent above that of the year previous.

The average number of pupils in daily attendance was 34,383.

TEACHERS.

There were employed 1,107 teachers, as follows:

	Male.	Female.	Total.
First eight divisons	102	687	789
Ninth, tenth and eleventh divisions	46	272	318
Total	148	959	1,107
Number of white teachers	85	654	739
Number of colored teachers	63	305	368
Total	148	959	1,107
City schools:			
White	73	593	666
Colored	46	272	318
Total	119	865	984
County schools:			
White	12	61	73
Colored	17	33	50
Total	29	94	123

The teachers were distributed as follows:

	White.	Colored.	Total.
Supervising principals	11	5	16
Normal schools	9	6	15
High schools	101	27	128
Grammar schools	237	90	327
Primary schools	319	204	523
Drawing	5	6	11
Music	6	4	10
Physical culture	6	4	10
Manual training	16	8	24
Cooking	12	5	17
Sewing	16	9	25
Librarian	1	.....	1
Total	739	368	1,107

The day schools cost—

For teachers and supervisors	$764,627.11
For janitors	59,544.57
For rent	14,934.00
For fuel	38,819.33
For contingent expenses, including printing, etc	28,516.95
For free text-books and supplies	39,996.57
For industrial instruction, including manual training, cooking and sewing	8,945.74
For flags	978.27
For furniture	3,441.80
For repairs to buildings	34,756.52
For new buildings	139,669.00
Total	1,134,229.86

The relative numbers enrolled in the different grades of our schools are shown by the following:

Schools.	White.	Colored.
In normal schools	0.34	0.36
In high schools	8.28	4.48
In grammar schools	36.82	26.19
In primary schools	54.56	68.97
Total	100.00	100.00

There were enrolled in the night schools 1,246 white and 1,596 colored persons. These were taught by 58 teachers, of whom 27 were white and 31 colored.

The night schools cost—

For teachers	$5,988.25
For incidental expenses	498.37
Total	6,486.62

The day schools were in session 185 days; the night schools were open 58 nights in the first eight divisions, and 42 nights in the ninth, tenth and eleventh divisions.

TABLE I.—*Showing attendance and cost of white and colored schools.*

	White.	Colored.	Total.
Whole enrollment:			
Normal schools	99	56	155
High schools	2,426	690	3,116
Grammar and primary schools	26,786	14,641	41,427
Total	29,311	15,387	44,698
Increase for the year	1,514	189	1,703
Per cent of increase	5.44	1.24	3.96
Average enrollment:			
Normal schools	98	56	154
High schools	2,083	593	2,676
Grammar and primary schools	22,237	11,754	33,991
Total	24,418	12,403	36,821
Increase for the year	925	215	1,140
Per cent of increase	3.93	1.76	3.19
Average attendance:			
Normal schools	95	55	150
High schools	1,957	567	2,524
Grammar and primary schools	20,604	11,105	31,709
Total	22,656	11,727	34,383
Increase for the year	873	197	1,070
Per cent of increase	4.01	1.71	3.21
Whole enrollment:			
Boys	14,257	6,883	21,140
Girls	15,054	8,504	23,558
Total	29,311	15,387	44,698
Whole enrollment in the night schools	1,246	1,596	2,842
Grand total	30,557	16,983	47,540

TABLE I.—*Showing attendance and cost of white and colored schools*—Continued.

	White.	Colored.	Total.
School buildings:			
Owned	66	36	102
Rented	12	3	15
Total	78	39	117
Schoolrooms: *a*.			
Owned	523	246	769
Rented	46	25	71
Total	569	271	840
Number of teachers:			
Male	85	63	148
Female	654	305	959
Total	739	368	1,107
Night schools	27	31	58
Grand total	766	399	1,165
Cost of tuition per pupil, including supervision (based on average enrollment)			$20.77
Cost per pupil for all expenses, except repairs and permanent improvements (based on average enrollment)			26.08

a Not including high schools.

TABLE II.—*Whole enrollment of pupils in the several kinds and grades of schools for the school year ending June 30, 1898.*

Grade.	White.	Colored.	Total.
Normal schools	99	56	155
High schools	2,426	690	3,116
Total	2,525	746	3,271
Grammar schools, city:			
Eighth grade	2,010	553	2,563
Seventh grade	2,102	717	2,819
Sixth grade	2,672	939	3,611
Fifth grade	2,882	1,277	4,159
Total	9,666	3,486	13,152
Primary schools, city:			
Fourth grade	2,989	1,640	4,629
Third grade	3,076	1,844	4,920
Second grade	3,281	2,235	5,516
First grade	4,273	3,024	7,297
Total	13,619	8,743	22,362
County schools	3,501	2,412	5,913
Grand total	29,311	15,387	44,698

TABLE III.—*Whole enrollment of pupils, boys and girls, white and colored, in the District of Columbia, by grades, for the school year ending June 30, 1898.*

Grade.	Whole enrollment.			
	Boys.	Girls.	Total.	Per cent.
Normal schools	14	141	155	0.35
High schools	1,293	1,823	3,116	6.97
Eighth grade	1,236	1,656	2,892	6.47
Seventh grade	1,394	1,769	3,163	7.08
Sixth grade	1,872	2,149	4,021	8.99
Fifth grade	2,232	2,511	4,743	10.61
Fourth grade	2,625	2,801	5,426	12.14
Third grade	2,780	2,981	5,761	12.89
Second grade	3,172	3,300	6,472	14.48
First grade	4,522	4,427	8,949	20.02
Total	21,140	23,558	44,698	100.00
SUMMARY.				
Normal and high schools	1,307	1,964	3,271	7.32
Grammar schools	6,734	8,085	14,819	33.15
Primary schools	13,099	13,509	26,608	59.53
Total	21,140	23,558	44,698	100.00

The number of schools below the high schools was as follows:

Grade.	White.	Colored.	Total.
Grammar schools, city:			
Eighth grade	44	12	56
Seventh grade	47	17	64
Sixth grade	57	20	77
Fifth grade	61	25	86
Total	209	74	283
Primary schools, city:			
Fourth grade	62	33	95
Third grade	64	38	102
Second grade	71	46	117
First grade	82	62	144
Total	279	179	458
County schools	77	50	127
Grand total	565	303	868
Number of half-day schools	134	110	244
Number of whole-day schools	431	193	624
Total	565	303	868

The average number of pupils (based on the whole enrollment) was as follows:

	White.	Colored.	Total.
High schools (to a teacher, excluding principals)	25.2	25.5	25.5
Grammar schools, city:			
Eighth grade	45.7	46.1	45.8
Seventh grade	44.7	42.2	44.0
Sixth grade	46.9	46.9	46.9
Fifth grade	47.2	51.1	48.4
Primary schools, city:			
Fourth grade	48.2	49.7	48.7
Third grade	48.1	48.5	48.2
Second grade	46.2	48.6	47.1
First grade	52.1	49.4	50.7
County schools	45.5	48.2	46.6

One thousand one hundred seven teachers were employed, as follows:

	White.	Colored.	Total.
Supervising principals	11	5	16
Normal schools	9	6	15
High schools	101	27	128
Total	121	38	159
Grammar schools, city:			
Eighth grade	44	12	56
Seventh grade	47	17	64
Sixth grade	57	20	77
Fifth grade	61	25	86
Total	209	74	283
Primary schools, city:			
Fourth grade	60	33	93
Third grade	62	35	97
Second grade	69	43	112
First grade	79	59	138
Total	270	170	440
County schools	77	50	127
Teachers of music	6	4	10
Teachers of drawing	5	6	11
Teachers of manual training	16	8	24
Teachers of cooking	12	5	17
Teachers of sewing	16	9	25
Teachers of physical culture	6	4	10
Librarian	1	.....	1
Grand total	739	368	1,107

The cost of schools for supervision and teaching was as follows:

	White.	Colored.	Total.
Supervision:			
1 superintendent	$3,300.00	$2,250.00	$5,550.00
8 supervising principals, each $2,000	16,000.00	.....	16,000.00
2 supervising principals, each $2,000	.....	4,000.00	4,000.00
1 supervising principal	.....	1,800.00	1,800.00
1 director primary work	1,500.00	990.00	2,490.00
2 assistant directors primary work	1,600.00	.....	1,600.00
1 assistant director primary work	.....	585.00	585.00
1 librarian	650.00	.....	650.00
1 clerk	1,200.00	800.00	2,000.00
1 messenger	300.00	200.00	500.00
Total	*a* 24,550.00	*b* 10,625.00	35,175.00
Cost per pupil, estimated on average enrollment	*a* .93	*b* 1.00	.96
Tuition:			
Normal schools—			
1 principal	1,500.00	1,500.00	3,000.00
2 teachers, each $1,200	2,400.00	.....	2,400.00
1 teacher	.....	1,000.00	1,000.00
2 teachers, each $900	1,800.00	.....	1,800.00
2 teachers, each $800	.....	1,600.00	1,600.00
2 teachers, each $675	1,350.00	.....	1,350.00
1 teacher	.....	700.00	700.00
1 teacher	.....	650.00	600.00
2 teachers, each $450	900.00	.....	900.00
Total	*c* 7,950.00	*d* 5,450.00	13,400.00
Cost per pupil, estimated on average enrollment	33.34	39.09	35.41
High schools—			
Principal	2,500.00	2,000.00	4,500.00
100 teachers	88,586.93	.....	88,586.93
26 teachers	.....	21,710.00	21,710.00
Total	91,086.93	23,710.00	114,796.93
Cost per pupil, estimated on average enrollment	43.72	39.98	42.89
Grammar schools, city—			
44 eighth, 47 seventh, 57 sixth, 61 fifth grade schools	170,222.50	.....	170,222.50
12 eighth, 17 seventh, 20 sixth, 25 fifth grade schools	.....	59,343.71	59,343.71
Total	170,222.50	59,343.71	229,566.21
Cost per pupil, estimated on average enrollment	20.43	20.93	20.56
Primary schools, city—			
62 fourth, 64 third, 71 second, 82 first grade schools	140,471.89	.....	140,471.89
33 fourth, 38 third, 46 second, 62 first grade schools	.....	87,339.69	87,339.69
Total	*e* 140,471.89	*f* 87,339.69	227,811.58
Cost per pupil, estimated on average enrollment	12.49	12.77	12.42

a First eight divisions.

b Ninth, tenth, and eleventh divisions.

c This includes the cost of teaching nine practice schools, first eight divisions, $4,682.34.

d This includes the cost of teaching nine practice schools, ninth, tenth, and eleventh divisions, $3,300.

e To be increased by the cost of teaching nine practice schools, $4,682.34.

f To be increased by the cost of teaching nine practice schools, $3,300.

	White.	Colored.	Total.
Tuition—Continued.			
Special teachers—			
6 music teachers, 5 drawing teachers, 6 teachers of physical culture	$12,960.00		$12,960.00
4 music teachers, 6 drawing teachers, 4 teachers of physical culture		$9,975.00	9,975.00
Total	a 12,960.00	b 9,975.00	22,935.00
Cost per pupil, estimated on average enrollment	.54	.94	.66
Manual training—			
Carpentry, 14; metal working, 2; cooking, 12; sewing, 16	30,006.37		30,006.37
Carpentry, 6; metal working, 2; cooking, 5; sewing, 9		13,709.35	13,709.35
Total	a 30,006.37	b 13,709.35	43,715.72
Cost per pupil, estimated on average enrollment	1.14	1.29	1.19
County schools—			
77 teachers	46,871.57		46,871.57
50 teachers		30,355.10	30,355.10
Total	46,871.57	30,355.10	77,226.67
Cost per pupil, estimated on average enrollment	16.95	16.64	16.83

a First eight divisions. b Ninth, tenth and eleventh divisions.

Summary:

Total cost of instruction, including supervision	$764,627.11
Whole number of pupils enrolled	44,698
Average number of pupils enrolled	36,821
Average number of pupils in daily attendance	34,383
Average cost of instruction, including supervision, estimated on—	
1. Whole enrollment	$17.11
2. Average enrollment	$20.77
3. Average daily attendance	$22.24

Janitors.

Total amount expended	$59,544.57

Contingent expenses.

Total amount expended	$28,516.95
Average amount per pupil (estimated on average enrollment)	.77

Free text-books and supplies.

Total amount expended	$39,996.57
Average amount per pupil (estimated on average enrollment)	1.18

Industrial instruction.

Total amount expended	$8,945.74

Rent.

Total amount expended	$14,934.00

Furniture.

Total amount expended	$3,441.80

Fuel.

Total amount expended	$38,819.33

Flags.

Total amount expended	$978.27

SUMMARY.

Amount expended, grand total	$959,804.34
Average cost per pupil (including all high and normal schools) for all expenses except repairs and permanent improvements:	
1. On whole enrollment	21.47
2. On average enrollment	26.07
3. On average daily attendance	28.91

SUPERVISION.

One superintendent (white)	$3,300.00
One superintendent (colored)	2,250.00
Eight supervising principals (white)	16,000.00
Two supervising principals (colored)	4,000.00
One supervising principal (colored)	1,800.00
One director of primary work (white)	1,500.00
One director of primary work (colored)	990.00
Two assistant directors of primary work (white)	1,600.00
One assistant director of primary work (colored)	585.00
One librarian (white)	650.00
One clerk and secretary (white)	1,200.00
One clerk (colored)	800.00
One messenger (white)	300.00
One messenger (colored)	200.00
Total cost of supervision	35,175.00
Average cost of supervision per pupil (estimated on average enrollment, 36,821)	.96

Normal school (first eight divisions).

Number of teachers trained	99
Average attendance	95
Number of teachers employed	9
Average salary	$883.33

Normal school (ninth, tenth and eleventh divisions).

Number of teachers trained	56
Average attendance	55
Number of teachers employed	6
Average salary	$908.33

High school (first eight divisions).

Number of pupils enrolled (boys, 1,073; girls, 1,353)	2,426
Average enrollment	2,083
Average attendance	1,957
Per cent of attendance	93.6
Average number of cases of tardiness per month	463
Number of teachers employed	101
Average salary paid	$901.85
Cost of tuition per pupil (estimated on average enrollment)	$43.72

High school (ninth, tenth and eleventh divisions).

Number of pupils enrolled	690
Average enrollment	593
Average attendance	567
Per cent of attendance	95.5
Average number of cases of tardiness per month	53.6
Number of teachers employed	27
Average salary paid	$878.14
Cost of tuition per pupil (estimated on average enrollment)	$39.98

Grammar and primary schools.

	White.	Colored.	Total.
Number of pupils enrolled	26,786	14,641	41,427
Average enrollment	22,237	11,754	33,991
Average attendance	20,604	11,105	31,709
Per cent of attendance	.....	.....	.....
Average number of cases of tardiness per month	2,393.8	625.1	3,018.9
Number of pupils dismissed	11	0	11
Number of cases of corporal punishment	55	38	93
Number of teachers employed	556	294	850
Average salary paid	$643.10	$602.17	$628.95
Average number of pupils to a teacher (estimated on average enrollment)	39.9	39.9	39.9
Cost of tuition per pupil (estimated on average enrollment)	$16.07	$15.06	$15.73

Special teachers.

	White. *a*	Colored. *b*	Total.
Drawing	5	6	11
Music	6	4	10
Physical culture	6	4	10
Average salary paid:			
Drawing	$837.00	$662.50	$741.82
Music	795.83	837.50	812.50
Physical culture	666.67	662.50	665.00
Average cost per pupil for special tuition (estimated on average enrollment)	.54	.94	.66

TEACHERS OF MANUAL TRAINING.

Carpentry and metal working	16	8	24
Cooking	12	5	17
Sewing	16	9	25
Average salary paid:			
Carpentry and metal working	$887.50	$765.62	$842.62
Cooking	603.03	578.00	595.67
Sewing	535.63	521.95	530.50
Average cost per pupil for manual training (estimated on average enrollment)	1.14	1.29	1.19

a First eight divisions. *b* Ninth, tenth and eleventh divisions.

TABLE IV.—*Showing enrollment of colored pupils in the District of Columbia, by grades, for the school year ending June 30, 1898.*

	Whole enrollment.			
	Boys.	Girls.	Total.	Per cent.
Normal school	13	43	56	0.36
High school	220	470	690	4.49
Eighth grade	283	370	653	4.24
Seventh grade	361	464	825	5.36
Sixth grade	477	587	1,064	6.92
Fifth grade	672	815	1,487	9.66
Fourth grade	888	1,063	1,951	12.68
Third grade	995	1,220	2,215	14.40
Second grade	1,214	1,438	2,652	17.23
First grade	1,760	2,034	3,794	24.66
Total	6,883	8,504	15,387	100.00
SUMMARY.				
Normal and high schools	233	513	746	4.85
Grammar schools	1,793	2,236	4,029	26.18
Primary schools	4,857	5,755	10,612	68.97
Total	6,883	8,504	15,387	100.00

Free text-books and supplies.

	Quantity.	Cost.		Quantity.	Cost.
BOOKS.			BOOKS—continued.		
Æsop's Fables	300	$81.00	Geographies—Continued.		
Algebras	196	186.69	The United States of America	2	$15.00
Analysis, Swinton's Word	162	38.88	Geolo es, Shaler	186	158.10
Arithmetics:			Government and Administration, Willoughby	162	97.20
Cook & Cropsey, Advanced	498	305.03	Grammars, Kerl's	306	183.09
Intellectual, Davies	569	118.07	Hans Andersen's Stories	348	103.82
Elements of, Milne	1,440	356.40	Histories, United States:		
Standard, Milne	996	537.01	Barnes	756	628.74
Arithmetic readers:			Eggleston	576	501.60
For second grade	1,620	283.50	Fiske	324	259.20
For third grade	1,824	398.24	Johnston	1,248	1,092.00
Civil Government, Fiske	84	67.20	Montgomery	600	510.00
Child's Health Primer	804	198.99	Ridpath	564	375.06
Copy books	13,524	924.14	Washington Day by Day	100	150.00
Dictionaries, Comprehensive	378	359.10	War of Independence	60	24.00
Drawing books	108	13.77	Hygiene for Young People	498	206.67
Drawing books, elementary course	589	70.68	Legend of Sleepy Hollow	684	23.94
Essentials of Health	156	111.54	Miles Standish	552	66.24
Evangeline	942	113.83	Music readers:		
Geographies:			Mason, Second	612	208.08
Frye, complete	1,428	1,462.51	Normal, First	1,428	389.13
Frye, elementary	30	18.00	Normal, Second, Part I	948	290.72
Redway, elementary	2,076	994.75	Normal, Second, Part II	150	46.00
Our Own Country	12	6.00	Normal, Third	36	18.36
			Music pamphlets	84	10.08

Free text-books and supplies—Continued.

	Quantity.	Cost.
BOOKS—continued.		
Old Greek Stories	312	$116.74
Our Continent, Shaler	192	122.40
Readers:		
Franklin—		
Primer and First	2,964	607.72
Second	2,604	796.39
Third	1,224	520.20
Fourth	672	342.72
Intermediate	276	140.76
Fifth	198	141.57
Normal—		
Primer	1,908	294.15
First	4,368	895.44
Second	3,756	1,151.84
Third	1,164	476.27
Fourth	1,896	966.96
Fifth	348	248.82
Snow Bound	396	47.52
The Story Hour	12	9.48
Word and Sentence Book	1,932	423.43
Total		19,304.67
SUPPLIES.		
Baskets for models	100	35.00
Beans ... bushels	6	5.58
Chalk, crayon ... gross	4,600	253.00
Clay ... barrels	81	121.50
Colors ... boxes	3,550	592.75
Do ... cakes	6,500	195.00
Color brushes	6,500	97.50
Compasses ... dozen	239	358.50
Dumb-bells ... pairs	90	25.90
Dumb-bell hooks ... do	90	11.10
Envelopes	25,025	50.05
Glue ... pints	400	104.00
Ink ... quarts	3,300	495.00
Measures, liquid ... set	1	.35
Models ... boxes	366	45.75
Models, material and tools for		67.75
Mucilage ... quarts	300	141.00
Paper:		
Blocks	25,200	756.00
Cardboard ... sheets	15,165	172.88
SUPPLIES—continued.		
Paper—Continued:		
Colored ... packages	3,311	$508.20
Composition, No. 1. do	21,322	1,493.24
Composition, No. 2. do	27,554	1,728.78
Composition, No. 3. do	29,468	2,062.76
Drawing ... reams	2,033.5	915.07
Drawing tablets	35,813	525.73
Examination ... reams	3,300	2,640.00
Practice ... packages	46,000	2,346.00
Wrapping ... reams	22	49.50
Pencils:		
Compass ... dozens	30	39.60
Drawing ... gross	527	553.35
"Washington Public School" ... gross	1,300	1,028.00
Penholders ... do	185	111.00
Pens ... do	4,500	1,402.50
Pointers ... dozens	15	26.25
Rubbers:		
Blackboard ... do	400	152.00
Diamond ... pounds	120	84.00
Rulers:		
Brass edge ... dozens	117	52.65
Plain edge ... do	175	52.50
Squares ... do	67	42.88
Sundries for busy work		21.70
Twine ... balls	66	3.96
Wandracks ... pairs	2	2.10
Wands	24	1.60
"Washington Public School collection" ... sets	3	7.50
Total		19,379.48
ADDITIONAL EXPENSES.		
Salary of custodian		900.00
Hauling and labor		340.47
Blank books and printing		69.86
Freight		.60
Stamp pad and ink		1.50
Total		1,312.42
Unexpended balance at the close of the year		3.43
Grand total		40,000.00

The number of pupils enrolled in the eight grades that were supplied with free books was 41,427, making the cost per pupil for all books and supplies $0.965, and the cost for books alone $0.466.

The cost for books was distributed as follows:

Grade.	Number of pupils.	Total cost.	Average cost per pupil.
First	8,949	$1,797.21	$0.201
Second	6,472	2,518.52	.389
Third	5,761	1,608.65	.279
Fourth	5,426	2,802.37	.516
Fifth	4,743	1,925.77	.406
Sixth	4,021	5,303.16	1.327
Seventh	3,163	2,223.31	.703
Eighth	2,892	1,093.26	.378
Total	41,427	19,304.67	.466

The cost for supplies and miscellaneous items was distributed as follows:

Grade.	Number of pupils.	Total cost.	Average cost per pupil.
First	8,949	$3,776.29	$0.422
Second	6,472	3,873.82	.598
Third	5,761	2,993.87	.519
Fourth	5,426	2,683.08	.494
Fifth	4,743	2,191.88	.462
Sixth	4,021	1,887.44	.469
Seventh	3,163	1,703.72	.538
Eighth	2,892	1,581.80	.547
Total	41,427	20,691.90	.499

The cost for books and supplies was distributed as follows:

Grade.	Number of pupils.	Total cost.	Average cost per pupil.
First	8,949	$5,573.50	$0.623
Second	6,472	6,392.34	.987
Third	5,761	4,602.52	.798
Fourth	5,426	5,485.45	1.010
Fifth	4,743	4,117.65	.868
Sixth	4,021	7,223.02	1.796
Seventh	3,163	3,927.03	1.241
Eighth	2,892	2,675.06	.925
Total	41,427	39,996.53	.965

Table showing the cost of all books and supplies, including miscellaneous expenses, by grades, for each year.

Year.	Number of pupils.	Total cost.	Average cost per pupil.
FIRST GRADE.			
1892	8,005	$5,748.43	$0.718
1893	8,076	2,163.90	.268
1894	8,446	3,175.17	.375
1895	8,148	3,464.01	.425
1896	8,472	4,254.93	.502
1897	8,475	3,889.95	.459
1898	8,949	5,573.50	.623
SECOND GRADE.			
1892	5,814	3,385.01	.582
1893	5,904	1,883.16	.318
1894	6,014	2,738.26	.455
1895	5,921	3,060.98	.517
1896	6,099	4,740.98	.779
1897	6,196	5,333.27	.859
1898	6,472	6,392.34	.987
THIRD GRADE.			
1892	5,390	6,480.37	1.202
1893	5,223	2,555.83	.489
1894	5,153	2,651.40	.514
1895	5,608	5,903.89	1.053
1896	5,687	3,857.10	.678
1897	5,808	3,737.62	.643
1898	5,761	4,602.52	.798
FOURTH GRADE.			
1892	4,877	9,165.19	1.879
1893	5,011	2,549.24	.508
1894	4,776	2,460.98	.515
1895	4,725	3,179.00	.673
1896	5,055	3,619.89	.716
FOURTH GRADE—continued.			
1897	5,150	$6,840.81	$1.328
1898	5,426	5,485.45	1.010
FIFTH GRADE.			
1893	4,357	9,835.50	2.257
1894	4,602	3,037.87	.660
1895	4,538	3,966.63	.874
1896	4,404	3,008.22	.681
1897	4,656	5,165.65	1.109
1898	4,743	4,117.65	.868
SIXTH GRADE.			
1893	3,548	15,407.45	4.342
1894	3,598	2,922.79	.815
1895	3,945	2,806.37	.711
1896	3,900	7,804.70	2.001
1897	3,767	4,775.78	1.267
1898	4,021	7,223.02	1.796
SEVENTH GRADE.			
1894	2,986	15,738.94	5.271
1895	3,145	3,735.79	1.208
1896	3,199	4,342.00	1.357
1897	3,179	4,263.37	1.341
1898	3,163	3,927.03	1.241
EIGHTH GRADE.			
1894	2,570	14,594.87	5.678
1895	2,685	3,497.85	1.274
1896	2,658	3,229.53	1.211
1897	2,731	3,858.04	1.412
1898	2,892	2,675.06	.925

Table showing the cost of books, by grade, for each year.

Year.	Number of pupils.	Total cost.	Average cost per pupil.
FIRST GRADE.			
1892	8,005	$3,954.95	$0.494
1893	8,076	134.84	.017
1894	8,446	501.36	.059
1895	8,148	744.94	.091
1896	8,472	985.45	.116
1897	8,475	768.39	.091
1898	8,949	1,797.21	.201
SECOND GRADE.			
1892	5,814	1,793.70	.308
1893	5,904	48.65	.008
1894	6,014	498.28	.082
1895	5,921	1,221.36	.206
1896	6,099	1,287.34	.211
1897	6,196	1,736.20	.280
1898	6,472	2,518.52	.389
THIRD GRADE.			
1892	5,390	4,209.92	.781
1893	5,223	207.24	.040
1894	5,153	507.56	.098
1895	5,608	3,767.94	.672
1896	5,687	1,421.96	.250
1897	5,808	1,097.78	.189
1898	5,761	1,608.65	.279
FOURTH GRADE.			
1892	4,877	7,670.16	1.573
1893	5,011	249.87	.049
1894	4,776	489.27	.102
1895	4,725	1,301.34	.275
1896	5,055	1,673.12	.330
FOURTH GRADE—continued.			
1897	5,150	$3,738.42	$0.726
1898	5,426	2,802.37	.516
FIFTH GRADE.			
1893	4,657	6,684.67	1.533
1894	4,602	346.50	.075
1895	4,538	2,255.35	.497
1896	4,404	909.88	.207
1897	4,656	2,992.28	.643
1898	4,743	1,925.77	.406
SIXTH GRADE.			
1893	3,548	12,796.60	3.606
1894	3,598	768.74	.216
1895	3,945	1,334.56	.338
1896	3,900	5,961.83	1.528
1897	3,767	2,891.50	.767
1898	4,021	5,303.16	1.327
SEVENTH GRADE.			
1894	2,986	14,108.90	4.725
1895	3,145	2,300.78	.744
1896	3,199	3,145.02	.983
1897	3,179	2,656.13	.835
1898	3,163	2,223.31	.703
EIGHTH GRADE.			
1894	2,570	13,143.70	5.114
1895	2,685	1,663.81	.608
1896	2,658	2,094.15	.787
1897	2,731	2,588.38	.948
1898	2,892	1,093.26	.378

Tables showing cost of supplies and of miscellaneous expenses, by grades, for each year.

Year.	Number of pupils.	Total cost.	Average cost per pupil.
FIRST GRADE.			
1892	8,005	$1,793.00	$0.224
1893	8,076	2,029.06	.251
1894	8,446	2,674.81	.316
1895	8,148	2,719.07	.334
1896	8,472	3,269.48	.386
1897	8,475	3,121.56	.368
1898	8,949	3,776.29	.422
SECOND GRADE.			
1892	5,814	1,591.31	.274
1893	5,904	1,834.51	.310
1894	6,014	2,239.98	.372
1895	5,921	1,839.62	.311
1896	6,099	3,453.64	.564
1897	6,196	3,597.07	.580
1898	6,472	3,873.82	.598
THIRD GRADE.			
1892	5,390	2,270.45	.421
1893	5,223	2,348.59	.449
1894	5,153	2,143.84	.416
1895	5,608	2,135.95	.381
1896	5,687	2,435.14	.428
1897	5,808	2,639.84	.454
1898	5,761	2,993.87	.519
FOURTH GRADE.			
1892	4,877	1,495.03	.306
1893	5,011	2,299.37	.459
1894	4,776	1,971.71	.413
1895	4,725	1,877.66	.398
1896	5,055	1,946.77	.385
FOURTH GRADE—continued.			
1897	5,150	$3,102.39	$0.602
1898	5,426	2,683.08	.494
FIFTH GRADE.			
1893	4,657	3,150.83	.724
1894	4,602	2,691.37	.585
1895	4,538	1,711.28	.377
1896	4,404	2,098.34	.476
1897	4,656	2,172.37	.466
1898	4,743	2,191.88	.462
SIXTH GRADE.			
1893	3,548	2,610.85	.726
1894	3,598	2,154.05	.599
1895	3,945	1,471.81	.373
1896	3,900	1,842.87	.472
1897	3,767	1,884.28	.700
1898	4,021	1,887.44	.469
SEVENTH GRADE.			
1894	2,986	1,630.04	.546
1895	3,145	1,435.01	.464
1896	3,199	1,196.98	.374
1897	3,179	1,607.24	.505
1898	3,163	1,703.72	.538
EIGHTH GRADE.			
1894	2,570	1,451.17	.564
1895	2,685	1,834.04	.670
1896	2,658	1,135.38	.427
1897	2,731	1,269.66	.465
1898	2,892	1,581.80	.547

TABLE V.—*Growth of the schools since the year 1880.*

School year ending June 30—	Average number of pupils enrolled.					
	First eight divisions.		Ninth, tenth and eleventh divisions.		Total.	
	Number.	Per cent of increase.	Number.	Per cent of increase.	Number.	Per cent of increase.
1880	15,027	.....	6,573	.....	21,600	.....
1881	15,494	3.10	6,567	*a* 0.09	22,061	2.13
1882	16,063	3.60	6,763	2.98	22,826	3.46
1883	16,524	2.80	7,070	4.53	23,594	3.36
1884	16,642	.71	7,225	2.19	23,867	1.11
1885	17,468	4.90	7,689	6.42	25,157	5.40
1886	18,720	7.10	8,191	6.52	26,911	6.97
1887	19,285	3.00	8,448	3.13	27,733	3.05
1888	19,762	2.40	8,791	4.06	28,553	2.95
1889	20,477	3.60	9,088	3.37	29,565	3.54
1890	21,077	2.90	9,289	2.21	30,366	2.70
1891	21,599	2.60	9,702	4.25	31,301	3.07
1892	22,264	3.00	9,942	2.47	32,206	2.89
1893	22,395	.59	10,097	1.56	32,492	.89
1894	23,483	4.85	10,141	.43	33,624	3.48
1895	23,798	1.32	10,046	*a* .94	33,844	.65
1896	24,347	2.26	10,296	2.48	34,643	2.36
1897	25,261	3.75	10,420	1.20	35,681	2.99
1898	26,243	3.88	10,578	1.51	36,821	3.19

a Decrease.

TABLE VI.—*Average enrollment of pupils in the white and colored schools and the number of teachers employed for each year since the year 1880.*

School year ending June 30—	Average enrollment.						Teachers.	
	First eight divisions.		Ninth, tenth and eleventh divisions.		Total.		Whole number employed.	Increase.
	Number.	Per cent of increase.	Number.	Per cent of increase.	Number.	Per cent of increase.		
1880	15,027	.....	6,573	.....	21,600	.....	434	.....
1881	15,494	3.10	6,567	*a* 0.09	22,061	2.13	461	27
1882	16,063	3.60	6,763	2.98	22,826	3.46	485	24
1883	16,524	2.80	7,070	4.53	23,594	3.36	505	20
1884	16,642	.71	7,225	2.19	23,867	1.11	525	20
1885	17,468	4.90	7,689	6.42	25,157	5.40	555	30
1886	18,720	7.10	8,191	6.52	26,911	6.97	595	40
1887	19,285	3.00	8,448	3.13	27,733	3.05	620	25
1888	19,762	2.40	8,791	4.06	28,553	2.95	654	34
1889	20,477	3.60	9,088	3.37	29,565	3.54	693	39
1890	21,077	2.90	9,289	2.21	30,366	2.70	745	52
1891	21,599	2.60	9,702	4.25	31,301	3.07	795	50
1892	22,264	3.00	9,942	2.47	32,206	2.89	845	50
1893	22,395	.59	10,097	1.56	32,492	.89	895	50
1894	23,483	4.85	10,141	.43	33,624	3.48	942	47
1895	23,798	1.32	10,046	*a* .94	33,844	.65	991	49
1896	24,347	2.26	10,296	2.48	34,643	2.36	1,031	40
1897	25,261	3.75	10,420	1.20	35,681	2.99	1,071	40
1898	26,243	3.88	10,578	1.51	36,821	3.19	1,107	36

a Decrease.

TABLE VII.—*Average enrollment of pupils, the number of teachers employed, the cost of tuition, and rates of increase for each year since 1880.*

School year ending June 30—	Average enrollment.		Teachers		Cost (excluding rent and permanent improvements).		
	Total.	Per cent of increase.	Number employed.	Increase.	Per pupil (based on average enrollment).	Aggregate amount.	Per cent of increase.
1880	21,600	.....	434	.....	$16.95	$366,199.51	.....
1881	22,061	2.13	461	27	17.28	381,314.19	4.12
1882	22,826	3.46	485	24	17.44	398,254.54	4.44
1883	23,594	3.36	505	20	17.78	419,594.60	5.35
1884	23,867	1.11	525	20	18.22	435,032.79	3.67
1885	25,157	5.40	555	30	18.66	469,550.51	7.93
1886	26,911	6.97	595	40	17.76	477,993.67	1.79
1887	27,733	3.05	620	25	19.11	509,194.01	6.52
1888	28,553	2.95	654	34	19.11	545,717.71	7.17
1889	29,565	3.54	693	39	20.11	594,774.73	8.98
1890	30,366	2.70	745	52	21.58	655,310.08	10.17
1891	31,301	3.07	795	50	21.44	671,124.08	2.41
1892	32,206	2.89	845	50	22.49	724,521.93	7.95
1893	32,492	.89	895	50	23.93	776,616.53	7.19
1894	33,624	3.48	942	47	24.56	825,992.84	6.36
1895	33,844	.65	991	49	24.78	838,757.60	1.54
1896	34,643	2.36	1,031	40	25.23	882,273.18	5.18
1897	35,681	2.99	1,071	40	26.03	913,595.79	3.56
1898	36,821	3.19	1,107	36	26.07	959,804.34	5.05

TABLE VIII.—*Whole enrollment of pupils in white and colored schools, the number of teachers employed, and the cost of tuition for each year since the year 1880.*

School year ending June 30—	Whole enrollment.						Teachers.		Cost (excluding rent and permanent improvement).		
	First eight divisions.		Ninth, tenth and eleventh divisions.		Total.		Whole number employed.	Increase.	Per pupil (based on whole enrollment).	Aggregate amount.	Per cent of increase.
	Number.	Per cent of increase.	Number.	Per cent of increase.	Number.	Per cent of increase.					
1880	18,378	.....	8,061	.....	26,439	.....	434	....	$13.85	$366,199.51	.....
1881	19,153	4.21	8,146	1.05	27,299	3.25	461	27	13.96	381,314.19	4.12
1882	19,031	*a*.63	8,289	1.75	27,320	.07	485	24	14.57	398,254.54	4.44
1883	19,836	4.22	8,710	5.07	28,546	4.48	505	20	14.69	419,594.60	5.35
1884	21,221	6.98	9,167	5.24	30,388	6.45	525	20	14.31	435,032.79	3.67
1885	21,267	.21	9,598	4.70	30,865	1.56	555	30	15.21	469,550.51	7.93
1886	22,198	4.37	10,138	5.62	32,336	4.76	595	40	14.78	477,993.67	1.79
1887	23,073	3.94	10,335	2.04	33,418	3.34	620	25	15.23	509,194.01	6.52
1888	23,810	3.19	11,040	6.71	34,850	4.28	654	34	15.65	545,717.71	7.17
1889	24,594	3.29	11,170	1.17	35,764	2.62	693	39	16.62	594,774.73	8.98
1890	25,468	3.55	11,438	2.39	36,906	3.19	745	52	17.75	655,310.08	10.17
1891	26,354	3.47	12,132	6.07	38,386	4.01	795	50	17.48	671,124.08	2.41
1892	27,398	3.96	12,280	1.21	39,678	3.36	845	50	18.26	724,521.93	7.95
1893	27,435	.14	12,329	.39	39,764	.22	895	50	19.53	776,616.53	7.19
1894	28,445	3.68	12,233	*a*.78	40,678	2.29	942	47	20.30	825,992.84	6.36
1895	29,078	2.22	12,479	2.01	41,557	2.16	991	49	20.18	838,757.60	1.54
1896	29,588	1.75	12,876	3.26	42,464	2.18	1,031	40	20.59	882,273.18	5.18
1897	30,141	1.87	12,854	1.17	42,995	1.25	1,071	40	21.60	913,595.79	3.56
1898	31,723	5.24	12,975	.94	44,698	3.96	1,107	36	21.47	959,804.34	5.05

a Decrease.

TABLE IX.—*Amount expended for rent and sites and buildings each year from the year 1880 to the year 1898, inclusive.*

School year ending June 30—	Rent.	Sites and buildings.	School year ending June 30—	Rent.	Sites and buildings.
1880	$28,908.35	$74,998.24	1890	$10,000.00	$240,467.39
1881	26,506.11	103,416.91	1891	9,892.00	229,078.00
1882	26,472.57	253,609.73	1892	9,602.00	220,344.47
1883	14,805.33	103,141.47	1893	8,951.25	42,270.36
1884	8,742.50	103,563.94	1894	9,825.50	66,939.60
1885	7,060.00	118,400.60	1895	9,648.00	66,408.91
1886	6,919.66	61,130.04	1896	14,736.50	185,601.12
1887	7,354.00	73,085.34	1897	14,188.00	182,514.26
1888	10,215.44	239,115.77	1898	14,934.00	139,669.00
1889	14,832.00	332,312.44			

THE FIRST EIGHT DIVISIONS.

The number of pupils enrolled during the year was 31,723—29,311 white and 2,412 colored. This is an increase of 1,582, or 5.24 per cent—white, 1,514, or 5.44 per cent; colored, 68, or 2.89 per cent—over the number registered last year.

The average enrollment was 26,243—24,419 white and 1,824 colored—being 982, or 3.88 per cent in excess of that of the previous year.

The number of pupils in daily attendance was 24,343—22,656 white and 1,687 colored—being 933, or 3.98 per cent greater than that of the preceding year.

Enrollment of pupils in the several kinds and grades of school for the school year ending June 30, 1898.

Normal school	99
High schools	2,426
Total	2,525
Grammar schools:	
Eighth grade	2,339
Seventh grade	2,446
Sixth grade	3,082
Fifth grade	3,466
Total	11,333
Primary schools:	
Fourth grade	3,786
Third grade	3,917
Second grade	4,237
First grade	5,925
Total	17,865
Grand total	31,723

TABLE X.—*Enrollment of pupils in the several kinds of schools for school year ending June 30, 1898, compared with the enrollment of the previous year.*

Grade.	Whole enrollment.		
	1897–98.	1896–97.	Increase.
Normal school	99	66	33
High schools	2,426	2,201	225
Total	2,525	2,267	258
Grammar schools:			
Eighth grade	2,339	2,221	118
Seventh grade	2,446	2,442	4
Sixth grade	3,082	2,879	203
Fifth grade	3,466	3,434	32
Total	11,333	10,976	357
Primary schools:			
Fourth grade	3,786	3,492	294
Third grade	3,917	3,854	63
Second grade	4,237	3,888	349
First grade	5,925	5,664	261
Total	17,865	16,898	967
Grand total	31,723	30,141	1,582

TABLE XI.—*Showing the whole enrollment of white pupils within the city, by grades, for the school year ending June 30, 1898.*

Grade.	Whole enrollment.			
	Boys.	Girls.	Total.	Per cent.
Normal school	1	98	99	0.38
High schools	1,073	1,353	2,426	9.40
Eighth grade	859	1,151	2,010	7.79
Seventh grade	922	1,180	2,102	8.14
Sixth grade	1,264	1,408	2,672	10.35
Fifth grade	1,380	1,502	2,882	11.17
Fourth grade	1,497	1,492	2,989	11.58
Third grade	1,556	1,520	3,076	11.92
Second grade	1,687	1,594	3,281	12.71
First grade	2,284	1,989	4,273	16.56
Total	12,523	13,287	25,810	100.00
SUMMARY.				
Normal and high schools	1,074	1,451	2,525	9.78
Grammar schools	4,425	5,241	9,666	37.45
Primary schools	7,024	6,595	13,619	52.77
Total	12,523	13,287	25,810	100.00

TABLE XII.—*Showing the whole enrollment of white pupils in the first eight divisions (city and county), by grades, for the school year ending June 30, 1898.*

Grade.	Whole enrollment.			
	Boys.	Girls.	Total.	Per cent.
Normal school	1	98	99	0.34
High schools	1,073	1,353	2,426	8.28
Eighth grade	953	1,286	2,239	7.64
Seventh grade	1,033	1,305	2,338	7.98
Sixth grade	1,395	1,562	2,957	10.09
Fifth grade	1,560	1,696	3,256	11.11
Fourth grade	1,737	1,738	3,475	11.86
Third grade	1,785	1,761	3,546	12.10
Second grade	1,958	1,862	3,820	13.02
First grade	2,762	2,393	5,155	17.58
Total	14,257	15,054	29,311	100.00
SUMMARY.				
Normal and high schools	1,074	1,451	2,525	8.62
Grammar schools	4,941	5,849	10,790	36.82
Primary schools	8,242	7,754	15,996	54.56
Total	14,257	15,054	29,311	100.00

TABLE XIII.—*Showing the whole enrollment of pupils (white and colored) in the first eight divisions (city and county) for the school year ending June 30, 1898.*

Grade.	Whole enrollment.			
	Boys.	Girls.	Total.	Per cent.
Normal school	1	98	99	0.31
High schools	1,073	1,353	2,426	7.65
Eighth grade	988	1,351	2,339	7.37
Seventh grade	1,072	1,374	2,446	7.71
Sixth grade	1,450	1,632	3,082	9.72
Fifth grade	1,658	1,808	3,466	10.92
Fourth grade	1,888	1,898	3,786	11.93
Third grade	1,952	1,965	3,917	12.35
Second grade	2,168	2,069	4,237	13.36
First grade	3,163	2,762	5,925	18.68
Total	15,413	16,310	31,723	100.00
SUMMARY.				
Normal and high schools	1,074	1,451	2,525	7.96
Grammar schools	5,168	6,165	11,333	35.72
Primary schools	9,171	8,694	17,865	56.32
Total	15,413	16,310	31,723	100.00

The number of schools below the high schools was as follows:

Grammar schools, city:

Eighth grade	44	
Seventh grade	47	
Sixth grade	57	
Fifth grade	61	
		209

Primary schools, city:		
Fourth grade	62	
Third grade	64	
Second grade	71	
First grade	82	
		279
County schools:		
White	77	
Colored	50	
		127
Total		615

Number of whole-day schools (white, 431; colored, 36)	467	
Number of half-day schools (white, 134; colored, 14)	148	
		615

The average number of pupils to a school (based on the whole enrollment) was as follows:

High schools (to a teacher, excluding principals)	25.2
Eighth grade	45.7
Seventh grade	44.7
Sixth grade	46.9
Fifth grade	47.2
Fourth grade	48.2
Third grade	48.1
Second grade	46.2
First grade	52.1
County schools:	
White	45.5
Colored	48.2

TEACHERS.

Seven hundred eighty-nine teachers, 687 females and 102 males, were employed as follows:

Supervising principals	11	
Normal school	9	
High schools	101	
		121
Grammar schools, city:		
Eighth grade	44	
Seventh grade	47	
Sixth grade	57	
Fifth grade	61	
		209
Primary schools, city:		
Fourth grade	60	
Third grade	62	
Second grade	69	
First grade	79	
		270
County schools:		
White	77	
Colored	50	
		127
Teachers of music	6	
Teachers of drawing	5	
Teachers of manual training	16	
Teachers of cooking	12	
Teachers of sewing	16	
Teachers of physical culture	6	
Librarian	1	
		62
Total (white—male, 85, female, 654; colored—male, 17, female, 33)		789

The cost of the schools for supervision and teaching was as follows:

Supervision:	
Superintendent	$3,300.00
Eight supervising principals	16,000.00
Director of primary work	1,500.00
Two assistant directors, primary work	1,600.00
One librarian	650.00
Clerk	1,200.00
Messenger	300.00
Tota	24,550.00
Cost per pupil, estimated on average enrollment (26,243)	.94
Normal school:	
Principal	1,500.00
Two training teachers	2,400.00
Two practice teachers	1,800.00
Four teachers	2,250.00
Total	*a* 7,950.00
Cost per pupil, estimated on average enrollment (98)	33.34
High schools:	
Director	2,500.00
Four principals	5,738.07
Ninety-six teachers	82,848.86
Total	91,086.93
Cost per pupil, estimated on average enrollment (2,083)	43.72
Grammar schools, city (44 eighth, 47 seventh, 57 sixth, 61 fifth grade schools)	170,222.50
Cost per pupil, estimated on average enrollment	20.43
Primary schools, city (62 fourth, 64 third, 71 second, 82 first grade schools)	*b* 140,471.89
Cost per pupil, estimated on average enrollment	12.49
County schools:	
White (77)	46,871.57
Colored (50)	30,355.10
Cost per pupil, estimated on average enrollment:	
White (2,765)	16.95
Colored (1,824)	16.64
Special teachers (6 music teachers, 5 drawing teachers, 6 teachers of physical culture)	12,960.00
Cost per pupil, estimated on average enrollment (24,062)	.54
Teachers of manual training (of carpentry, 14; of metal working, 2; of cooking, 12; of sewing, 16)	30,006.37
Cost per pupil, estimated on average enrollment (26,243)	1.14
Total cost per pupil, estimated on average enrollment	21.13

a This includes the cost of teaching nine practice schools, $4,682.34.

b To be increased by the cost of teaching nine practice schools, $4,682.34.

TABLE XIV.—*Buildings and rooms occupied (owned and rented) in the first eight divisions at the close of the school year ending June 30, 1898 (excluding the high schools).*

	Divisions.								
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh	Eighth.	Total.
Buildings owned	8	7	*a* 9	6	8	10	17	*b* 14	79
Buildings rented	.....	*c* 4	*d* 1	.....	*e* 3	1	.....	.....	9
Total	8	11	10	6	11	11	17	14	88
Rooms owned	*f* 78	*b* 69	*g* 68	*b* 55	60	76	*k* 83	*b* 75	564
Rooms rented	.....	*h* 20	*h* 2	*h* 2	*i* 15	4	*b* 2	.....	45
Total	78	89	70	57	75	80	85	75	609

a One occupied by manual-training and sewing (cutting) schools.
b One occupied by cooking school.
c Two occupied by cooking and sewing (cutting) schools and two by manual-training school.
d Occupied by cooking school and by manual-training school.
e One occupied by cooking and sewing (cutting) schools.
f Three occupied by manual-training and two by cooking schools.
g One occupied by manual-training, one by cooking, and one by sewing school.
h Two occupied by cooking schools and three by manual-training schools.
i Occupied by sewing (cutting) school.
j One occupied by manual-training school and one by sewing (cutting) school.

NIGHT SCHOOLS.

The following table shows the facts of enrollment, attendance and cost:

Table showing facts relating to night schools.

Schools.	Cost of teachers.	Whole number of persons enrolled during the year.	Average attendance per night.	Percentage of attendance.	Number of sessions.	Number of teachers.
WHITE.						
High School	$884.50	489	169	84.1	61	8
Franklin School	464.00	60	34	94.1	58	4
Henry School	464.00	181	33	80.4	58	4
Wallach School	459.50	178	49	74.4	58	4
Jefferson School	377.00	168	46	77.6	58	3
Curtis School	174.00	35	17	74.2	58	1
Grant School	93.00	25	9	73.6	31	1
Total	2,916.00	1,136	357	.....	.....	25
Schools of cookery:						
609 O street NW	132.75	90	19	81.6	60	1
Wallach School	108.00	20	16	85.9	49	1
Total	240.75	110	35	83.3	.....	2
Total white	3,159.75	1,246	424	78.6	.....	27
COLORED.						
Mott	348.00	93	53	78.8	58	3
Wilson	241.50	54	32	77.2	58	1
Hillsdale	145.00	54	48	95.8	58	2
Total colored	734.50	201	133	84.3	.....	6
Grand total	3,894.25	1,447	525	.....	.....	33

SCHOOL ATTENDANCE AND ACCOMMODATIONS.

A condition that is not uncommon with us, because ours is a rapidly growing community, presses itself especially on our attention at this time—the lack of adequate accommodations for those who present themselves for instruction. There is little argument for compulsory education in any community until the authorities have provided adequately for all who voluntarily present themselves to be taught. No little blame for truancy and nonattendance is chargeable to a lack of healthful accommodations. It has long been my opinion that were adequate and appropriate, comfortable and healthful, buildings and grounds provided for all who would voluntarily attend school, and were rational, natural instruction or leadership given or secured, there would be little or no occasion for truant laws. Uncomfortable and uninviting conditions of school appointments and bad teaching are the causes of most truancy rather than the inherent disposition of children to be bad. Incipient truancy shows the possession of a sense of right, the appreciation of appropriateness or simple justice or fairness as often as it does a disposition to do wrong. I have this faith in the human heart.

That the child should seek to be comfortable and happy is as natural as that water should seek its level. That the school does not secure to the child comfort and happiness argues in many cases against the school rather than against the child. This would not be true if learning were necessarily a task, instead of a concomitant and product of those activities that result in the building or growth of mind. One of the most unfortunate ideas connected with education and schools in the past was that of associating learning with tasks, and it is one of the chief and most blessed characterizing ideas inducing the revolution that is now taking place in education, that learning, or knowledge getting, by rational methods, gives to the learner mental and physical delight, and consequently physical health at the same time.

I am not indifferent to the fact that there may be children in our city who do not attend school; I believe there are many. Nor would I pass over with slight consideration or careless thought the question of how much truancy there is in the city or District. I am more solicitous however, that proper care should be given to the great number of persons who present themselves for education, which care should have respect both to school accommodations and to the teaching, than I am concerned about the failure to give training to the comparatively small number of those who are never found in the schools. Formation, in the work of mind building and body building, is more potent, valuable and economical than reformation; prevention in caring for the health of a community is far more effective than curative efforts (therapeutics); but prevention (indirect formation) in the work of character making is much more potent than reformation or correction, and is therefore most imperative in the work of education. Character is more important

than health and soundness of body. The guaranties against truancy are adequate and well-equipped schoolrooms, full-time, small schools taught by teachers who know how to teach, commodious and well-appointed play grounds or school-ground gymnasiums.

The establishment of truant schools, beside being unwise in that it is the characterization of those who attend such schools as bad, which in any case is wrong and in most cases is not true, is virtual acknowlegdment that those for whom such schools are intended have not been provided with proper school privileges or have not been correctly taught when they have attended school. Truants are made by bad schoolrooms, crowded schools and poor teaching.

Children can not be correctly or well taught in great crowds. Schools therefore must be of moderate size; they ought to be small. This requires much school room.

I have on former occasions given my opinion of half-day schools, a kind of school that I have conscientiously opposed on all occasions when it has been reasonable to do so:

[From the Annual Report of 1890-91.]

The half-day school falls short of what is due the child whom we assume to educate. Cultivation is not a product of spasmodic effort. Strength, power, culture, self-control are of slow growth, coming more easily and rapidly to some, however, than to others. The half-day school gives little opportunity to observe the effect of effort on different minds. It gives little opportunity for the study of different and a resulting modification of treatment. The tendency of the half-day school is to enforce uniformity of teaching, which is not good teaching. Young children more than older ones require individual attention. The half-day school gives little opportunity for this.

Much of the time of the true teacher of the very young child is occupied in observing and waiting; waiting for the child's mind to act, and observing the process of acting and the result of it. There is no time for such waiting in the half-day school.

The young child is taught properly only by means of his senses. There must be time given him in which to see. His mind must be given time in which to act. He must have time in which to show that his mind has been affected.

We can not hope to do for our primary pupils what we ought to do for them, what they have a right to demand of us, until there is provided for each school of forty or forty-five children a comfortable, healthful, well-equipped schoolroom in which the teacher may have opportunity and time to teach scientifically and well.

I recommend that the school day of the primary grades be lengthened to four hours and a half where our accommodations will allow it to be done, and that the day be divided into two sessions.

I believe our next effort should be directed to the elimination of the half-time schools from our system.

[From the Annual Report of 1893-94.]

I must still insist and call your attention to the fact that a half-day school for any scholar above the kindergarten grade is not advisable and not profitable, and for a pupil above the first or second grade is well-nigh a farce. To give a lad 12 years of age opportunity to attend school three and a half hours a day, knowing well that he will spend the rest of his time on the street, is robbery of the boy's time and a danger to society. If the boy could be profitably employed in some educating as well as remunerative industry, the case would be very different.

As was indicated last year in the annual report, our schools are being driven into basements and rented buildings. The basement rooms are unfit for school purposes; never being intended for such, having no means of ventilation, no proper means of heating, and having no wardrobes or other conveniences. Yet in some of these basement rooms it has been found necessary to place two schools, one in the forenoon, the other in the afternoon. The rented rooms are without exception unfit for school purposes, being without ventilation other than open windows and open doors, which are always harmful and fraught with danger, and are without adequate, and in some cases even without respectable, closet accomodations.

The training that the child should have after he is old enough to leave the nursery and be placed in the hands of one whose business it is to direct him specifically toward definite results in educational lines can not be secured in half-day sessions of school. To show that this is true would involve the whole discussion of what education is and how it may be secured, a question which is too large to be presented in this connection. I must be content to do little more than to make the statement dogmatically. A brief word may be permitted, however.

The knowledge getting that in the formative period of life helps the learner most is that which he gets by his own activities correlated for the accomplishment of specific results. The gaining of knowledge in this way is precisely that which has advanced the race to its present condition. Only this kind of knowledge gaining secures new growth or advancement on the part of the race. What is true of the race is largely true of the individual. To get knowledge by use of all the means of knowledge getting—the senses, the muscles, the nerves, the brain, induced by self—takes time. Time may be saved apparently by dictating knowledge to the child; but if knowledge be dictated, the exercise of muscles, senses, nerves, brains, in correlation symmetrically applied will not be secured, which is the only means by which a healthy mind is made and the only way by w ich power through self-help comes. Thus mind and body will not be built symmetrically or be made healthy and robust, and, therefore, education in its better sense—in that sense only in which it is wise to seek it in the formative period—will not be secured. "He who makes two blades of grass grow where but one grew before is a benefactor." He is a creator, but relatively he does more by far for himself than he does for anybody else, for he creates a bigger self and with it gets corresponding power. To learn by the method which creates knowledge and builds self in its beginnings takes time, though ultimately the correct process saves time, as is seen in the development of races and the building of nations. Half-day schools are not conducive to correct processes of teaching. Their tendency is aggressively in the opposite direction.

It was thought almost universally a few years since, and is held now by many, for that matter, that a half day is all that the young child should attend school. Those who advocate the half-day attendance have in mind the idea of tasks assigned, of lessons to be learned, keeping still, sitting erect, restraint and privation, whereas I have in

mind a place in which the child is employed in interesting investigation, seeking pleasure and getting health and knowledge at the same time, making knowledge by effort of mind and body in correlation, and by like effort applying knowledge, and thus coming to understand himself and his surroundings, and in some degree also the relations existing between himself and his surroundings.

SOME REASONS WHY OUR ACCOMMODATIONS ARE NOT EQUAL TO OUR DEMANDS.

A dozen years ago the schoolrooms of Washington were seated to accommodate 64 pupils each. Since that time we have used our best efforts to reduce the number of pupils allotted to each teacher to 40. This has greatly increased the demand for school room. Though we have accomplished something toward securing the results desired, we have not yet reached ideal conditions, many of our schools now being larger than they ought to be.

In Washington, as in most large cities, the growth of school accommodations has not at all times kept pace with the growth of the city. For instance, in the year 1892 the increase of pupils reported was 1,292, but appropriations that year were made for but one new schoolhouse (8-room)—that is, accommodations for 360 children only. Repetition of this inadequate provision soon places the school facilities alarmingly behind. When the schools are thus inadequately provided for of course the cost of fully remedying the difficulty becomes very great.

The population of the District is scattered over 68 or more square miles, and in many localities is changing rapidly. A large territory requires a relatively large number of buildings for a given school attendance. In some places in the center of the city the schoolhouses are not crowded, whereas in some places in the suburbs the congestion is annoying and harmful.

During the last year the school attendance increased 1,703, as shown by this report, most of which was in the white schools (white, 1,514; colored, 189). To accommodate this increase in the number of children would require five 8-room buildings. But there is another condition to be taken into consideration, that is, that these pupils may be so distributed that the providing of five buildings might not relieve the congestion. Yet these are matters that can not be foreseen or prevented.

Inadequacy of school accommodations has been increased to some extent by the introduction of manual training, cooking and sewing. These three industries require room—that is, we must have schoolrooms for the manual training and the cooking schools of the seventh and eighth grades, and for the sewing (cutting and fitting) schools of the sixth grade. Some of our schoolrooms, therefore, that would otherwise be occupied by regular schools are used for the above-named industries as special schools, thus reducing the number of schoolrooms allotted to regular purposes. We have striven as strenuously to provide good rooms for manual training, cooking, and cutting and fitting

schools as we have for other kinds of schools. By this means, in part, we have given to these industries their proper standing in our system of education.

It will be seen that during the last twelve years or more many factors have combined in making it difficult to provide school accommodation commensurate with the demands.

1. A reduction in the size of schools or in the number of pupils allotted to a teacher.

2. The rapid growth of population over a large extent of territory.

3. The introduction of several correlated branches of activities—cooking, sewing, manual training.

4. The change in population from central or business localities to suburban parts of the District.

It would seem to be financial wisdom to provide amply for room, since all other requirements are freely given.

On this subject the board said:

[Annual Report of 1885-1886.]

It will be observed that this unhappy result flows solely from the failure to supply adequate schoolroom accommodation. We have teachers enough for all the schools, and if we had as many schoolrooms as are needed, each of these twelve thousand children could receive the benefit of a full day's school without the employment of a single additional teacher or the expenditure of a single additional dollar for teachers' salaries. We occupy precisely the attitude, from a business standpoint, of an employer who finds it necessary to engage and pay the wages of a thousand skilled employees, but who receives the benefit of only half days' labor from a third of their number because of his own refusal to provide working room for them all.

[Annual Report of 1886-1887.]

As stated in the last report of the board, we employ and pay teachers enough to conduct the exercises of every one of the schools during the whole of every school day in the year. If only sufficient schoolrooms were provided, every pupil could have the benefit of the whole of every school day throughout the year, without the cost of a single additional dollar. As was stated in that report:

"We occupy precisely the attitude, from a business standpoint, of an employer who finds it necessary to engage and pay the wages of a thousand skilled employees, but who receives the benefit of only half days' labor from a third of their number because of his own refusal to provide working room for them all."

Washington should be willing to provide schoolroom and appointments for all who desire to attend. She is financially able to do so. The children are here. All who attend our schools are of tender age, too young and too immature to be turned away. There is nothing else for them to do. It would be unwise if not unsafe to let them be idle, or even to give them excuse for idleness. The genius of our American civilization brooks no idleness, but demands work—work of hands, brains, and hearts. "I pray thee, then, write me as one who loves his fellow-men," has little meaning to him who does not know and love work. The invention of machinery has not reduced the necessity for work; it has dignified all work by making workers think. Machinery

with its concomitant of education eliminates toil as the doom of humanity, and puts in its stead intelligent work, the boon and delight of altruistic civilization.

KINDERGARTENS.

One of the most important events of the past year to be recorded in this report is that of securing an appropriation for the starting of kindergartens as a part of our system of schools. For years we have striven to secure this important addition to our schools, whose beginning marks a decided advance in our means of education. Its advent is to be contemplated with profound gratification, although it will involve greatly increased labor and impose important and difficult responsibilities. When kindergartens shall have been thoroughly incorporated into our schools and assimilated with our educational efforts, changed conditions will result in all grades of work, for kindergartens, although play schools are yet a means of education and must be so considered. If they are a means of education, ultimately their effect will necessarily be to change the character of the schools above them in some respects. By means of kindergartens we shall begin purposive effort in education one or two years earlier than we have done in the past; our results will therefore be different and better. The changes in results may not be measurable in percentages, because the differences will be qualitative rather than quantitative, yet there will be an appreciable gain in the amount of knowledge and power secured by the pupils. On no other consideration can their existence be advocated as a part of a school system.

The difficulty to which the foregoing remarks that I have made refer—that of securing adequate accommodations for the children who present themselves for education—will be very largely increased by the necessity of providing rooms for the children of kindergarten age. There will be little profit and still less justice in providing kindergartens for the few. They should be provided for all as soon as it is practicable to do so. This will require many additional school rooms.

This subject will demand most careful consideration on the part of the Board of Trustees, the Commissioners, and the Congress. The citizens of the District of Columbia may well give their attention to a question so important as this one is. At the present writing (December 1) we have established 16 kindergartens (10 under my supervision), all but one of which have been housed in regular school rooms. This shows that there was vacant room, in spite of the fact that we have so many half-day schools. The reasons for this condition of things are seen in the foregoing remarks on school accommodations, (change of locality in the population of the District). It will be necessary to have in view existing facilities for the care of children when we ask for additional schools of this grade, and to be governed accordingly. Unless we are sure of having room for their accommodation, it will be wise not

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to ask for them. I hope that we shall not, to any great extent, be driven to renting, because proper rooms can not be found in which to put kindergartens or any other kind of schools except in very rare instances. The board of trustees, I believe, ought to refuse to put a school of any grade in a room such as we are forced to take in most instances when renting is resorted to. The day has passed in Washington, for which parents should be deeply thankful, when a school will be crowded into a room that is unhealthful and otherwise wholly unfit for the purposes of a school.

I am gratified to be able to state to the board that, judging from the outlook at present, I believe we have started our kindergartens under conditions that give warrant of success to them. The teachers who have been employed are persons who for the most part have had experience and have proven their worth.

TEACHERS.

The introduction of kindergartens seems to renew and should emphasize our solicitude for securing the right kind of teaching for our children. No subject relating to the Washington school system of education has received more careful consideration than that of securing teachers who can teach well. This subject, after all that may be said and done, is paramount when considering the education of the child. Kindergartens, because they are for the young children, are not to be intrusted to teachers of indifferent acquirements and immature years; but rather should one say, kindergartens, because for the youngest children, require the broadest womanhood, the richest attainments, the most mature thought and the ripest experience on the part of their teachers. It was wise, I believe, for the board of trustees to require of applicants for teachers' positions in our kindergartens a preparation, scholastic and technical, as broad and exacting as those required of candidates for positions in our graded schools. Three leading ideas force themselves uppermost on my mind when considering this subject of the qualifications of teachers in general.

1. Teachers who are not themselves in the atmosphere of the love of knowledge, who are not both rich and discriminating in knowing, can not teach well. The prerequisite scholastic condition to teach a subject is not secured by a few months' effort in the study of that subject given for the purpose of getting ready to teach. This condition is secured only by a study of the subject for the sake of self-culture, to make self better and bigger; a study and effort given to the subject because of love for it, and whose results have been taken on as a part of the self, making the self fuller and richer, and at the same time more discriminating, more catholic and cautious. The knowledge or scholastic qualifications for teaching any subject—history, literature, art, science, nature, mathematics—is not taken on as a trade or profession; it is secured only as a growth, becoming a part of him, a qualifying and

identifying condition of him, who would teach. When we shall have teachers teaching science, literature or history who know and are full of the subject, we shall have persons in our schools who have something to give in the way of broader and better views. Until we get such teachers in every grade of school we shall not have schools that will fit children to participate in and enjoy and improve our American civilization; schools that are demanded by the double fact that the child's time is given and passes irrevocably, and that the community expects such work to be done.

2. Our teachers must know how to teach. Fulness of knowledge, ripeness of character, clearness of view, honesty of purpose, faithfulness in action, all combined do not necessarily make a teacher. A teacher must have learned how to study the child and must be willing to do it. He must have learned to temper his demands to the conditions that he finds and be expert and ready in doing it. He must know his subject so well in its relation to the child's condition that he will make no mistake in promptly adjusting his requirements to the best interests of the child. How much is involved in the foregoing, when considered in relation to the young child who begins a new life under direct purposive leadership, though in play (kindergarten), is beyond the power of words to set forth. Certainly it is more than simply an interesting pastime to teach a kindergarten. If the Board of Trustees will give their careful consideration to this subject, as they have done in the past to securing proper teaching ability in the grade schools, we may look only for gratifying results. The question of how to secure trained and competent kindergartners is one that is yet to be settled. Certain it is to my mind that it were better not to have kindergartens than to put uneducated and untrained, or uneducated and ill-trained people into them as teachers.

3. Education obtained from books alone, neglecting graphic art, music, architecture, manual skill, and unmindful of or ignoring the helpfulness of hand and eye in the work of learning, has made many persons indifferent to and neglectful of the values of the humane and refining influences of society. Such education gives no experience—no training involving humane and refining action. This has been a loss whose value it would be hard to estimate. Home, among the various institutions of the social make-up, is sensitive to the lack of culture in eye, ear and hand. Our average society will not be superior to our average homes. The person whose sensibilities have been developed and refined by intelligent contact with nature, song, art, architecture and literature relating to them possesses something, other things being equal, out of which to make a home that will help in building a better society. Home making to comport with the civilization will come only through that education which gives an understanding and leads to an appreciation of the strengthening, refining, ameliorating factors of civilization. Home that is a home may be the happiest, and thus would be the safest spot of earth to the boy, the girl, the man or the woman.

The training that neglects the physical (sensuous) in the education of man endangers the home in the structure of society, and thus endangers society itself.

In addition to a full and ripe knowledge of the subject he would teach, and the necessary acquired skill in presenting it, a teacher should know the relation the school sustains to the home and to society in general, and should have an appreciative acquaintanceship with the iufluencing instrumentalities that build refined society. Surely not everyone who applies is entitled to teach school.

MANUAL TRAINING HIGH SCHOOL.

Another important item in our growth or expansion during the past year to be recorded is that of providing for the manual training high school. In the last estimates the Board of Trustees asked for two such schools, one of which was provided for in part at the last session of Congress. This will make a much-needed addition to our manual training facilities, for which we are indebted to a strong public sentiment of the thinking people of the city as expressed by the honorable Commissioners, the Board of Trustees, and the Board of Trade, which expression was unanimous on the part of each of these distinguished bodies. Our schools have been so conducted during the last decade or longer as to prepare our children for the work contemplated by this manual training high school. The attainments of the children, boys and girls, are such when leaving the grammar schools that the instruction given in the manual training high school is sought by many because they are prepared for it and understand what it means to them or what it will do for them by fitting them for life in the civilization of which they are a part. Trained to be careful, thoughtful and continuous in effort, trained to see and to do, trained to know the relation of seeing and doing each to the other and the relation of the two to the demands of society and to the advantages which society has in store for them, many of our children now seek, when leaving the grammar school, a place of education where they may meet, know and study the meaning of those instrumentalities which characterize America's condition and have so largely contributed to the century's growth and the character of American citizenship. This, therefore, though a high school, so called, is simply a department in our school system for fitting the learners for the common condition of successful American labor, American business and American cultured life.

The high-school work here alluded to is done in large degree now, but it is done in places unsuited for it, in rooms that are inadequate in size and are ill lighted and otherwise unhygienic. The high school contemplated by this provision is growth, only a growth. It is in no sense the establishment of a manual training school. It is a provision

for the continuance, on a broader scale and under better conditions, of that which we are now doing. The Washington schools have grown in manual skill and art appreciation, and now ask for opportunity to continue the work which the city has recognized as right, advisable and in every way to be desired for the last ten or twelve years. We have not needed this increased opportunity very long. We now should have it or the schools will suffer. We recognize the fact of its coming as an evidence of the justice and wisdom of those who provide for our wants. This school, if it is carried out on the plan of the work which fits the children for it who will feed it, will prepare children who choose the opportunities it will offer for invention or fashioning, or for leadership or directorship in those industries that require skilled hands and trained minds, and offer remuneration accordingly.

The other manual training high school asked last year should come soon as an urgent necessity. Its coming will give promise of the making of valuable manhood and contented citizenship and home makers.

NIGHT SCHOOLS.

Our night schools may in the main be pronounced a success. The principle of gradation and its consequent promotion, and the concomitant ambition engendered, are not secured in a high degree, yet they obtain to a useful and profitable purpose. The element or class of persons attending these schools is such that close gradation is impossible, yet a classification of pupils is made that allows some teaching by classes while the size of the classes offers much opportunity for individual work.

We ought to have larger appropriations for these schools, as many localities are deprived of their privileges at present. It is desirable, I think, to give night schools to half a dozen or more suburban places in addition to the schools we now have. The people in several places have made strong appeals for schools to which we have not been able to respond.

The night high school, a high school only in the sense that it is the highest department of the night schools, is especially useful and valuable. Here are found messengers, delivery clerks, cash boys, typewriters, boys and girls learning trades, and proprietors of grocery stores, and other people engaged in business. An individual talk with many of these pupils in the hall of their school the opening night revealed to me the great possible value there is to the community in an evening hour of study properly directed. The problem with us is: "How can we make these schools what they ought to be?" It is solved, as so many questions of education are solved ultimately, by getting the right kind of teaching done. This we are striving to do.

There is something of vagueness, as discovered by a personal

inquiry into the purposes of those who attend the night schools, expressed so frequently by the words, "I want to learn something, and to know more than I do, so that I can do my work better." This very vagueness shows the responsibility resting on us to secure persons who may quickly determine what these people can learn, what they should try to learn, as well as the means by which they may best succeed in the brief time they have to give the work. They come to these schools wanderers needing direction, seekers needing to be told what to seek. The vagueness of their purpose, coupled with the earnestness depicted on their countenances and uttered by their tongues, proves the folly of giving to them inexperienced teachers, or teachers who teach solely for the pittance allowed for an evening's work. I can not urge too strongly on the Board of Trustees the obligation devolving on the authorities to allow none but experienced people to teach in these schools. If the night schools are to be simply places where persons who are not otherwise provided for can get salaries, they would better be closed and the money either returned to the treasury or be given to some purpose that will benefit the community at large. It is not profitable for this or any other community to open schoolroom doors, warm and light the houses, and pay salaries for the instruction of people presenting themselves at the night schools unless teachers are employed who thoroughly know their business, and besides knowing what to do are imbued with a philanthropic spirit or feeling toward their fellow-man.

I respectfully call your attention to the statistics of these schools, given elsewhere.

LIBRARIES.

The public schools have reasons for profound gratification in two important movements in society in the capital city, which they ought not to fail to express. These are, the opening to the public at night of the Congressional Library and the establishment of a free city library under Congressional authority. If the public schools have not helped in creating a demand for these two valuable movements in our social organism they justly deserve the criticism of the people who support them. They should have done so; I hope I am not wrong in believing they have done so. If our schools do not create an appreciable demand for opportunity to read, study, and investigate outside their doors, and in other than school hours, they do not accomplish by a very considerable and important amount what they ought to accomplish. If the reading done by the pupils of the schools outside their schoolroom doors is not of a character to be commended by the thoughtful lover and wellwisher of society, then do the schools not accomplish all they ought to accomplish in helping to make society. If the teaching in

the school does not give that love for broader, better, and more accurate knowing on lines that feed and nourish a better, broader, and safer citizenship and manhood, then would they better change their methods of instruction. "By their fruits ye shall know them." If the reports of the librarians show that the children go to the libraries without aim or that they seek reading matter merely for pastime, then may the citizen properly and rightfully offer words of criticism on the conduct of the school. I am pleased to state that the authorities of the Congressional Library have been courteous and accommodating to an unlimited degree to our children, and I am further gratified to announce that the authorities of the city free library have asked the cooperation of the school authorities in the selection of books for their shelves, and I have been assured by the president of the board of trustees of the city library and also by the librarian himself, that in purchasing books the interests of the school children will be considered with thought and care. In these libraries we have another addition to the public educational facilities, another branch of the public school. We have reason to be gratified for these new facilities and these additional means for making the public education of the city, in some measure at least, commensurate with the dignity, culture, and beauty of the capital.

SOME RECOMMENDATIONS.

Experience has proved very clearly that the time from Christmas to the close of the year, toward the last of June, is too long for continuous school work and the unremitting care and responsibility of the teachers' duties. Every year many teachers show before school closes that the strain on their physical strength has been too severe. Our teachers assume responsibility. Primarily they decide all promotions without resort to examinations, which burdens the teacher though it relieves the pupils very much. Our teachers do not simply keep school. They care for the children; they are, as a rule, solicitous for the welfare of each and every child whom they teach. Thoughtful care and continuous solicitude are wearing and exhausting. The work, especially during the spring months, seems to be enervating.

There should be a break in this long term of school, I think, a break long enough to give freedom from work that will insure rest and recuperation.

I respectfully suggest an amendment to the rules giving a week of vacation at Easter.

I suggest that hereafter when vacancies occur in any of the departments of special work—music, drawing, cooking, sewing, manual training, and physical education—after merited and desirable promotions have been made, appointments be made only from such persons as shall have passed satisfactory examinations in the subjects respectively for which teachers are required.

It will no doubt be wise, however, to provide that normal school graduates who may possess the required technical skill may be appointed to vacancies in the discretion of the committee in charge.

Our custom of giving precedence to graduates of our normal schools in filling vacancies has given very general satisfaction.

The appointment to teachers' positions from the lists of graduates of the normal school in the order of their presentation to the board at graduation has given entire satisfaction, both to the school management and to the graduates themselves. The selection of teachers from those who have passed our examinations for eligibility to teachers' positions in the order of standing shown by their examinations has also given satisfaction without any exception worthy of remark.

There has been no pressure of consequence for the appointment of teachers who have failed to pass our examinations.

There has been no pressure on us worthy of remark to appoint to positions without examinations when it has been made known that we require them.

The appointment of all teachers is now free from influence of every kind whatsoever, except those for places in the high schools and in the special studies above enumerated.

It is important, I believe, for the interests of the schools, and at the same time in perfect fairness to applicants for places, that appointments of teachers for all the special subjects shall be also made on merit alone and thus kept free from every influence other than that of known qualifications.

If the board should decide to require competition by examinations for special places it should be definitely fixed by rule whether all such examinations shall be under the direction of the committee on teachers, as is now the case with the examinations of applicants for the ordinary teacherships, or shall be distributed among the committees having jurisdiction over the various branches of special work.

It may be advisable to include the high schools in making the change of rules here suggested. I am inclined to the belief that this should be done.

OTHER REPORTS.

I take pleasure in calling your attention especially to the reports of the heads of departments and the directors of special work. These reports will show you much of the detail which it is your privilege to know and which I believe will interest you. I gladly present these reports as intelligently representing what in my judgment the public schools of the city are attempting and what they are accomplishing.

I have the honor to be, your obedient servant,

W. B. POWELL,
Superintendent of Schools.

DECEMBER 1, 1898.

REPORT OF SUPERVISING PRINCIPALS.

WASHINGTON, D. C., *June 30, 1898.*

DEAR SIR: On behalf of the supervising principals of the first eight divisions, I have the honor to submit herewith a brief summary of the school work for the year 1897–98. Following this will be found a number of pages of tabulated statistical matter, showing in detail the leading facts pertaining to each of the several school divisions.

ENGLISH.

To follow and to give an account of all that was done in teaching English during the last school year would be to tell the story of a large part of the effort put forth in every study of the school curriculum. Nature study, geography, physiology, history, art, arithmetic, cooking, and manual training were made to yield experiences, sensations, discoveries and conclusions which were fruitful subjects for expression in oral and written English. Training in language making was thus related to all the activities of the schoolroom. It was a product of no less importance than that of the subject to which it was related. So it happened that while English as a separate study demanded and received much time and attention, every other branch of school work contributed to its advancement. Such a position in a scheme of school work is conspicuous and challenges attention. Were the results worthy of the position?

Language teaching proceeds mainly along four lines: Reading, oral composition, written composition, and the study of structure and grammatic idiom. Some observations concerning the treatment of each of these branches of the subject and of the results obtained therein are briefly submitted.

READING.

Early in the first year the pupil begins to learn to read. At first it is a word or a short sentence expressing his own knowledge or thought; but soon a group of sentences, his own composition, is read. Having been prepared by talking, by examination of objects, by observation, or by any of the other devices at the command of the skilful teacher, the pupil is delighted to recognize his own thought on the printed page. The symbols (words, sentences), by this association with that which he already knew, become a part of his knowledge, and thereby help him to further advancement in the art of reading. Following this method the pupils of the primary grades made rapid progress

in reading during the last year. In the first grade, two Primers and two First Readers, a part of Æsop's Fables as well as considerable related matter prepared by the teachers, were read. In the second grade, two Second Readers and a part of the Arithmetic Reader, all of Æsop's Fables, much related matter furnished to give interest, and the first-grade books were read. Two Third Readers, the Arithmetic Reader, Hans Andersen's Fairy Tales, a part of the Health Primer, much related matter in verse and story put on the board by the teacher, and a review of the second-grade books constituted the reading for the third grade. In the fourth grade the purpose in reading changes. A part following the method of the primary grades expresses the pupil's knowledge; the rest, on the other hand, contains knowledge new to him, which he is to get from the printed page. From this grade on, pupils get more and more of their information from books, i. e., by reading. In the fourth grade were read the Franklin Fourth Reader and a part of the Normal Fourth Reader, the Arithmetic Reader, a part of the Physiology, the Primary Geography, a geographical reader, Our Own Country, The Old Greek Stories, and a pamphlet on United States History "The Story of Two Inaugurations." The fifth-grade pupils read the Normal Fourth Reader and a part of the Franklin Intermediate Reader, the Arithmetic Reader, a geography, and a geographical reader "Our American Neighbors." In the sixth grade, besides the Franklin Fifth Reader, the Geography, three geographical readers, four Histories of the United States, and a physiology, a careful study was made of The Courtship of Miles Standish and Evangeline. The Normal Fifth Reader and the text-books on geography and history are the reading of the seventh year. Special mention should be made of the successful reading by the pupils of this grade of Shaler's Our Continent. The eighth-grade pupils read the Constitution of the United States, Fiske's Civil Government, Snow Bound, The Legend of Sleepy Hollow, and a dozen or more selected masterpieces of English and American literature.

This enumeration does not include all the reading of any grade. To get the whole there should be added much reading of compositions and related matter procured by the teacher. This varies in amount in different schools and can not be estimated here. Again, the work in school prompts pupils to read other books which they find at home and which they get from libraries, a fact that adds much to the reading prescribed in school.

The foregoing shows that there has been abundant training in reading. At each stage of development the work has been good. Pupils in the higher grades show the benefits of this training in their facility in getting the meaning of what they read. This is no small matter, when the character of their reading is considered.

During the past year rather more attention was given in the higher grades to oral reading than before, but there is still room for progress in this direction.

ORAL COMPOSITION.

By oral composition is meant the setting forth in connected speech whatever a pupil has to say upon the subject in hand. The opportunities for such language training are as numerous as are the occasions for pupils to talk. Varying in formality to suit the thought expressed, the effort to use good and exact language in recitation affords excellent training for the pupil. In connection therewith are presented to the teacher opportunities for the most effectual work in molding the forms of expression of the pupils. During the past year many teachers manifested their appreciation of the value of work of this nature by persistent and painstaking endeavor to shape the spoken English of the schoolroom. In such cases there was always a marked superiority in the written compositions in comparison with those of pupils less carefully trained. In leaving this subject, I desire to emphasize the desirability of making more prominent in the future this feature of language teaching.

WRITTEN COMPOSITION.

As has been the custom in preceding years, composition writing formed an important part of last year's work. In every grade pupils were constantly given practice in writing in their own language upon subjects taken from the studies of the grade. First they were put in possession of something to say, and then were asked to say it in the best way at their command. This work has been followed to such an extent that it is no longer a task for a pupil to write a composition. The character of the work was good. Perhaps no further comment is needed than to say that last year's composition writing was equal to the best of preceding years.

STRUCTURE AND GRAMMATIC IDIOM.

More advance was made in this work over that done in former years than in some other branches of language teaching. The analysis of the sentence was mastered by sixth and seventh grade schools, and corresponding increase of strength was shown in grades below. The study of parts of speech was carefully done and the word work assigned to the various grades was well attended to.

HISTORY.

The monograph, in which the ceremonies and incidents of the last inauguration are compared with those of Washington's time, was again used in the fourth grade, happily eliminating the line of demarcation between the period in the child's life in which he is gradually gaining the power of self-interpretation by experience alone and that other time when the world of books is discovered with its apparently endless record of the exploits of others. To the teachers of this grade considerable praise is due for the judicious use of this small though important link in the chain of development.

In the next grade especial effort was put forth to secure from pupils

simple yet concise statements in sequential order of the great movements that led to the English colonization of America. The progress of the English race from the time of the early Britons to the establishment of the several settlements along the coast line of the newly discovered hemisphere was briefly told in one short threadlike narrative relieved of all traces of anecdote.

In the sixth grade a somewhat similar plan was employed, carrying forward the story to the Revolutionary war, but permitting during the period of review the introduction of some related anecdotal matter for the purpose of illustration and embellishment. As in former years, four different text-books were used to lead the children to self-activity under the topical method of teaching.

In the seventh grade the teachers endeavored to depart from the teaching of disconnected and isolated facts of the political field, as well as from the routine treadmill of the Presidential administrations, and tried to show that history deals with the entire life of a people in the process of growth. Grouping the phenomena of history into different lines, the pupils were led to take ideas as germs and to trace them through all the phases of their growth, making transverse as well as parallel threads of thought through the entire subject. They sought to find the relationship between events, and, uniting several events into a great series to ascertain what permanent institution had resulted therefrom, finally discovering for themselves that the many interests involved, whether political, religious, educational, industrial, or social, constitute the life of the people as one organic whole. Thus both teacher and pupils were brought to feel that the content of history is ever moving onward.

In the eighth grade much admirable work was accomplished in the study of civil government. The pupils have done so well in this subject that the query arises whether it would not be well at this time to place in their hands some pamphlet showing the chief facts of English history in connective form whereby they may gain a better insight into the growth of liberty and the gradual evolution of English law.

NUMBER WORK.

To this topic the same careful thought and investigation were given by the supervising corps as in the preceding year, practically along the same lines. The effort to induce the teachers to make in all their class-room work a sensible application of numbers to things was continued. Relations of numbers were considered first, after which came much drill work of every kind. Gymnatsic work in small numbers and the development of principles prevailed during the class-room exercises, while the more difficult problems were reserved for home and seat work. Reviews were frequent as the plan of tracing principles through the different processes was pursued.

Better results were undoubtedly secured, although less time was devoted to the subject than in former years.

FIELD WORK.

By field work in our schools is meant all teaching done outside the schoolroom. The term especially relates to excursions made by the teacher with the whole or a part of the school to the fields to observe Nature, geological phenomena, physiographic features, plant life, or animal life; to the school yards or streets to measure distances and surfaces; to public buildings for the purpose of studying them in their governmental relations, to note architectural types and excellencies, or to consult collections contained within them.

Public buildings, such as the Capitol, are sought by the lower grades, early in the beginnings of home geography, as centers from which to study the plan of the city and incidentally to gather a few simple historical facts. They are sought by higher grades with wholly different objects, namely, for purposes of art study or as concrete examples of the operations of civil government.

Reports from teachers of definite field work done during the school year 1896–97 showed the large total of thirteen hundred trips. Though no reports are available covering the year just ended, it is probable that the number of such outings would aggregate from fifteen hundred to two thousand.

There is a growing tendency on the part of the teacher to accept the excursion to the fields as a useful part of her work, and to take pleasure therein, instead of, as at first, considering it a necessary evil.

Do the measurable gains of excursions to wood, field and museum compensate for the known losses in pecuniary outlay and interruption to schoolroom work? Not unless such outings are carefully planned in every detail and conducted with intelligence and skill. No doubt much unprofitable work is done by teachers who neglect the necessary preparation or unfortunately lack the knowledge and breadth of view required to enable them to take a class into the field.

The pedagogical law which demands that a teacher should know more of a subject than she imparts holds good with special emphasis in field teaching. No thoughtful person can be brought face to face with a landscape, in the presence of a class of children, without a certain elevation of feeling that marks the occasion as one of peculiar interest and responsibility. But the vastness of the subject itself tends to confusion, unless the teacher has thought out every step in advance and knows how to select a few precious things from Nature's bountiful treasury and to offer them to her open-minded auditors as a new possession, or rather as an old and common possession now for the first time put in new and attractive relations.

The teacher who sees nothing in nature can point out nothing to her pupils. It is the blind leading the blind. Pupils conducted into the field under such a guide would better be in the schoolroom engaged in any of its most commonplace occupations. A sailor, whose opportunities have been bounded by the horizon of a small and shallow lake,

paddling about in a tiny skiff, is a foolhardy man to attempt the dangers of the Atlantic without a suitable craft and without adequate knowledge of the sea—its vastness, its depth, its hidden rocks, its appalling strength. His limitations, which have made him perfect in his narrow art, have unfitted him for navigating the wide and turbulent sea; all his landmarks are gone, and he must learn to be a sailor under new and more difficult conditions. It is so with the teacher. The four walls of the schoolroom impose their limitations upon her. Within them she may be a perfect instructor, and perfection in such an art is a noble achievement. Few human occupations are more worthy of high honor and emolument. The schoolroom and not the field must always be the place wherein most of the teacher's work will be done, but it is no less true that her work is supplemented immeasurably by teaching done elsewhere, especially out of doors.

As soon as the threshold of the class room is crossed she is confronted by a field demanding an enlargement of her powers in every direction. She must have broader knowledge, and at the same time her task of holding attention and imparting instruction becomes harder with every change of environment. The enlargement of her theater of operations multiplies the demands upon her knowledge, pedagogical skill, and especially upon her power of selection.

Therefore, to make adequate use of the museum, the library, the public institution, the broad sweep of valley and hill, the temporary exposure of geologic strata, the infant river basin as seen in the school yard, she must know accurately, she must select wisely, and she must use only so much as can be assimilated to advantage by the learner.

It is only just to our teachers to say that encouraging proofs of progress are found in the schools to-day along these very lines. Abundant proofs are close at hand that most of our teachers have been afield to some purpose.

GEOGRAPHY.

The schoolroom work in geography was to a large extent the supplement of that done in the field. Having obtained the interpreting nuclei abroad, the children found a deeper meaning in the maps and texts.

Place geography was not neglected, yet its acquisition was not by isolated drill but by frequent correlation. Other studies which ran parallel to it afforded the pupils many interesting facts relating to commercial and political geography.

LECTURES.

One of the best innovations of the past year was the introduction of illustrated lectures as a permanent feature in the course of instruction. The value of bringing before the children a graphic repre-

sentation of subjects pertaining to the course of study can hardly be overestimated. When they have read and studied a selected masterpiece of literature, such as Evangeline, or The Courtship of Miles Standish, or The Legend of Sleepy Hollow, it is a great benefit to the pupils to have brought before them pictures of the scenes of which they have been reading. Foreign lands, cities, geological formations, anatomy, mountains, rivers, physical phenomena, natural history, manners and customs, all may be so represented as to make, under the instruction of an intelligent and entertaining lecturer, a quick, correct and permanent impression on the mind of the pupil. The science work in the lower grades especially may be most ably supplemented by the projection on the screen of well selected pictures, showing birds, insects, and other animals in their natural colors and at their characteristic occupations. A series of illustrated talks to the teachers by the superintendent and by eminent specialists in the departments on topics in line with the studies pursued in the various grades is in contemplation, and I am convinced will be of great assistance to the teachers in their work.

In my estimation, it is a matter of congratulation to the public school system in general that the stereopticon has found a place as supplement to the regular course of study. By the efforts of teachers and pupils one division already has equipped itself with a complete outfit for illustrating talks to the pupils, and it is hoped that soon each of the other divisions will possess this valuable adjunct to the school equipment.

IN CONCLUSION.

In a word, the work of the year was good. While what had been gained in previous years was held some distinct advances were made by reason of which corresponding improvements may be expected to follow. No mention of the subject of discipline has been made in this report, because the order in the schools has been so uniformly good as to seem to be the natural condition, requiring no comment. The teachers have shown their customary fidelity and devotion to duty during the past year. They deserve high praise for their zeal in striving to advance all the interests of the schools.

The supervising principals are under obligations individually to their respective trustees for wise counsel in all times of need and for constant support in the discharge of their duties.

On behalf of my colleagues on the board of supervising principals, I thank you for the courteous consideration which has characterized all your relations to them.

Very respectfully,

I. FAIRBROTHER.

Mr. W. B. POWELL,
Superintendent of Schools.

FIRST DIVISION.

TABLE I.—*Showing location of buildings and distribution of schools, by buildings.*

School and location.	Eighth grade.	Seventh grade.	Sixth grade.	Fifth grade.	Fourth grade.	Third grade.	Second grade.	First grade.	Total.	Schoolrooms.	Number of teachers.
Franklin, 13th and K nw	2	1	1	1	2	2	2	3	*a* 14	*b* 15	*a* 11
Dennison, S street nw., between 13th and 14th	2	2	1	1	1	1	1	1	10	*c* 12	10
Force, Massachusetts avenue, between 17th and 18th nw	2	2	*f* 2	*g* 2	1	1	1	1	12	*d* 12	12
Adams, R street, between 17th and 18th nw.	1	1	1	1	1	1	1	2	9	8	9
Berret, 14th and Q nw	1	1	1	1	1	1	1	1	8	9	8
Harrison, 13th street, between V and W streets nw	....	1	2	1	1	1	1	1	8	8	8
Phelps, Vermont avenue, between T and U streets nw	1	....	.....	1	1	1	*h* 2	1	7	8	7
Thomson, 12th street, between K and L streets nw	....	1	1	1	....	....	.....	....	3	*e* 6	3
Whole number of schools:											
1898	9	9	9	9	8	8	9	10	71	78	68
1897	9	9	9	9	8	9	8	10	71	78	71

a 9 practice schools under the supervision of 6 normal school teachers.
b 1 room used by normal school.
c 1 room used for cooking school and 1 room for cutting school.
d 1 room used for cooking school.
e 1 room used for cooking school and 2 rooms for manual training.
f 1 6–5.
g 1 5–4.
h 1 2–1.

TABLE II.—*Showing condition of buildings.*

Building.	How heated.	Light.	Ventilation.	Water-closets.	Play rooms.	Yards.	Owned or rented.
Franklin	Steam	Excellent.	Good	Good	Excellent.	Small	Owned.
Thomson	Furnace	Good	Fair	do	Fair	do	Do.
Adams	do	Excellent.	Excellent.	Excellent.	Excellent.	Fair	Do.
Dennison	Steam	do	do	Good	do	Excellent.	Do.
Force	do	do	Good	do	do	Fair	Do.
Harrison	Furnace	do	Excellent.	Excellent.	do	do	Do.
Phelps	do	do	do	do	Fair	do	Do.
Berret	do	Good	do	do	do	Small	Do.

TABLE III.—*Showing half-day schools.*

School.	Half-day schools.		Grades of half day schools, 1898.
	1898.	1897.	
Force	2	2	1, 2
Adams	2	.....	1, 1
Total	4	2	.....

TABLE IV.—*Showing distribution of pupils by grades, attendance and average number per teacher.*

Grade.	Number of schools.		Whole enrollment.		Average enrollment.		Average daily attendance.		Average number of pupils per teacher.	
	1898.	1897.	1898.	1897.	1898.	1897.	1898.	1897.	Based on whole enrollment.	Based on average enrollment.
Eighth	9	9	424	387	354	340	331	318	47	39.3
Seventh	9	9	407	413	342	351	319	327	45.2	38
Sixth	8½	9	384	401	324	347	302	317	45.1	38.1
Fifth	9	9	442	448	362	364	336	338	49.1	40.2
Fourth	8½	8	443	327	367	299	337	282	52.1	43.1
Third	8	9	382	384	309	312	285	287	47.7	38.6
Second	8½	8	414	367	314	293	300	271	48.7	36.9
First	10½	10	529	495	365	315	332	314	50.3	34.7
Total	71	71	3,425	3,222	2,737	2,657	2,542	2,454	48.2	38.5

TABLE V.—*Showing percentage of attendance cases of tardiness of pupils and absence and tardiness of teachers.*

Month.	Percentage of attendance.	Tardiness of teachers.	Cases of tardiness.		Substitute service.	
			1898.	1897.	1898.	1897.
September	96.7	10	132	104	22	4
October	93.7	16	467	416	36.5	20
November	93	12	564	395	14.5	37
December	91.7	18	569	453	17	10.5
January	92	28	645	677	53.5	33
February	91.6	17	629	496	44.5	36
March	92.1	21	560	555	47.5	15.5
April	90	10	574	636	79	20
May	91.2	8	490	558	101	24.5
June	92.2	8	339	313	14.5	33
Total	.....	148	4,969	4,603	430	233.5

TABLE VI.—*Showing the number of graduates from the Washington Normal School, from other normal schools, from colleges, and nongraduates.*

Washington Normal School	47
Other normal schools	4
Colleges	2
Nongraduates	15
Total	68

SECOND DIVISION.

TABLE I.—*Showing location of buildings and distribution of schools, by buildings.*

School and location.	Eighth grade.	Seventh grade.	Sixth grade.	Fifth grade.	Fourth grade.	Third grade.	Second grade.	First grade.	Total.	Schoolrooms.	Number of teachers.
Abbot, corner of 6th street and New York avenue	1	1	1	1	1	1	1	1	8	9	8
Seaton, I street nw., between 2d and 3d streets	2	2	1	2	1	1	1	1	11	*a* 12	11
Twining, 3d street nw., between N and O streets	1	1	1	1	1	1	2	2	10	8	10
Morse, R street nw., between 5th street and New Jersey avenue	1	....	....	2	2	2	2	2	11	8	11
Henry, P street nw., between 6th and 7th streets	1	3	3	1	1	2	2	....	13	12	13
Polk, corner 7th and P streets nw	1	1	2	1	1	....	....	3	9	8	9
Webster, corner 10th and H streets nw	1	1	2	2	2	2	2	2	14	12	14
Whole number of schools:											
1898	8	9	10	10	9	9	10	11	76	69	76
1897	8	9	9	9	10	9	10	11	75	69	75

a One room used for cooking school.

TABLE II.—*Showing condition of buildings.*

Building.	How heated.	Light.	Ventilation.	Water-closets.	Play rooms.	Yards.	Owned or rented.
Abbot	Furnace	Good	Good	Good	None	None	Owned.
Seaton	Steam	Excellent	Fair	Fair	Excellent	Good	Do.
Twining	Furnace	do	Good	do	Fair	do	Do.
Morse	do	do	do	do	do	do	Do.
Henry	Steam	do	Fair	Good	do	do	Do.
Polk	Furnace	do	Good	do	do	do	Do.
Webster	Steam	do	Fair	do	do	None	Do.

TABLE III.—*Showing half-day schools.*

Building.	Half-day schools.		Grades of half-day schools, 1898.	Number above second grade, 1898.
	1898.	1897.		
Abbot	.....	.....	.....	.....
Seaton	.....	.....	.....	.....
Twining	4	2	1, 1, 2, 2	.....
Morse	6	6	1, 1, 2, 2, 3, 3	2
Henry	2	2	2, 2	.....
Polk	2	2	1, 1	.....
Webster	4	4	1, 1, 2, 2	.....
Total	18	16	.....	2

TABLE IV.—*Showing distribution of pupils by grades, attendance, and average number per teacher.*

Grade.	Number of schools.		Whole enrollment.		Average enrollment.		Average daily attendance.		Average number of pupils per teacher.	
	1898.	1897.	1898.	1897.	1898.	1897.	1898.	1897.	Based on whole enrollment.	Based on average enrollment.
Eighth	8	8	317	343	267	285	252	271	39.6	33.3
Seventh	9	9	387	437	325	377	307	354	43	36.1
Sixth	10	9	494	412	430	353	401	331	49.4	43
Fifth	10	9	488	489	416	430	389	400	48.8	41.6
Fourth	9	10	427	482	364	423	337	397	47.4	40.4
Third	9	9	457	422	396	376	371	355	50.7	44
Second	10	10	441	455	379	415	353	384	44.1	37.9
First	11	11	581	598	444	447	403	412	52.8	40.3
Total	76	75	3,592	3,638	3,021	3,106	2,813	2,904	47.2	39.7

TABLE V.—*Showing percentage of attendance, cases of tardiness of pupils, and absence and tardiness of teachers.*

Month.	Percentage of attendance, 1898.	Tardiness of teachers, 1898.	Cases of tardiness.		Substitute service.	
			1898.	1897.	1898.	1897.
September	96.8	1	61	85	8	8.5
October	93.5	11	307	391	26.5	31.5
November	94.3	7	346	357	18	56
December	92.4	15	331	327	31.5	47
January	92.7	8	441	536	14	71
February	93.3	15	366	336	60	54.5
March	93.2	12	389	417	49	65.5
April	91.1	13	350	396	58.5	68.5
May	91.9	9	347	413	45	28.5
June	94	4	225	270	18	60.5
Total	.....	95	3,163	3,528	328.5	491.5

TABLE VI.—*Showing the number of graduates from the Washington Normal School, from other normal schools, from colleges, and nongraduates.*

Washington Normal School	58
Other normal schools	4
Colleges	1
Nongraduates	13
Total	76

THIRD DIVISION.

TABLE I.—*Showing location of buildings and distribution of schools, by buildings.*

School and location.	Eighth grade.	Seventh grade.	Sixth grade.	Fifth grade.	Fourth grade.	Third grade.	Second grade.	First grade.	Total.	Schoolrooms.	Number of teachers.
Peabody, 5th and C streets ne	2	2	3	3	3	3	2	2	20	12	20
Carbery, 5th, between D and E streets ne	1	1	1	1	1	1	2	2	10	8	10
Maury, B street, between 12th and 13th streets ne	1	1	1	1	1	2	2	2	11	8	11
Towers, 8th and C streets se	1	1	1	1	1	1	1	3	10	8	10
Wallach, D street, between 7th and 8th streets se	1	2	3	3	2	*a* 2	1	....	14	*b* 14	14
Brent, 3d and D streets se	1	1	1	1	2	*a* 2	1	2	11	8	11
Lenox, 5th street, between G street and Virginia avenue se	1	1	1	2	1	*a* 2	1	2	11	8	11
McCormick, 3d street, between M and N streets se	....	....	....	....	1	*a* 2	1	2	6	4	6
Total number of schools:											
1898	8	9	11	12	12	15	11	15	93	70	93
1897	8	9	11	11	12	13	12	15	91	68	91

a One 3-2 grade. *b* One room used as a cooking school.

TABLE II.—*Showing condition of buildings.*

Building.	How heated.	Light.	Ventilation.	Water-closets.	Play rooms.	Yards.	Owned or rented.
Peabody	Steam	Excellent	Excellent	Excellent	Fair	Small	Owned.
Carbery (*a*)	Furnace	do	Good	do	do	do	Do.
Maury	do	do	Fair	Poor	Excellent	Fair	Do.
Towers (*a*)	do	do	Good	Excellent	Fair	Ample	Do.
Wallach	Steam	do	do	do	Good	do	Do.
Brent	Furnace	do	Poor	Poor	Excellent	Small	Do.
Lenox	do	do	Good	Excellent	Good	do	Do.
McCormick	do	do	Poor	Fair	None	Ample	Do.

a In Carbery and Towers boys' play rooms are used as coal vaults.

TABLE III.—*Showing half-day schools.*

School.	Half-day schools.		Grades of half-day schools.	Number above second grade.	
	1898.	1897.		1898.	1897.
Peabody	6	6	1, 1, 2, 2, 3, 3	2	2
Carbery	4	4	1, 1, 2, 2	.....	.....
Maury	6	4	1, 1, 2, 2, 3, 3	2	.....
Towers	4	8	1, 1, 1, 2	.....	2
Wallach	2	4	2, 3	1	4
Brent	6	8	1, 1, 2, 3, 3, 4	3	5
Lenox	6	6	1, 1, 2, 3, 3, 4	3	3
McCormick	4	4	1, 1, 2, 3	1	1
Total	38	44	.....	12	17

TABLE IV.—*Showing distribution of pupils by grades, attendance, and average number per teacher.*

Grade.	Number of schools.		Whole enrollment.		Average enrollment.		Average daily attendance.		Average number of pupils per teacher.	
	1898.	1897.	1898.	1897.	1898.	1897.	1898.	1897.	Based on whole enrollment.	Based on average enrollment.
Eighth	8	8	397	379	338	333	321	315	49.6	42.2
Seventh	9	9	410	397	363	352	345	336	45.5	40.3
Sixth	11	11	548	500	478	449	453	421	49.8	43.4
Fifth	12	11	593	559	524	500	490	466	49.4	43.6
Fourth	12	12	614	595	552	526	520	492	51.1	46
Third	15	13	725	674	654	586	611	544	48.3	43.6
Second	11	12	504	541	444	474	415	442	45.8	40.3
First	15	15	811	706	622	538	572	492	54	41.4
Total	93	91	4,602	4,351	3,975	3,758	3,727	3,508	.....	.....

TABLE V.—*Showing percentage of attendance, cases of tardiness of pupils, and absence and tardiness of teachers.*

Month.	Percentage of attendance.	Tardiness of teachers.	Cases of tardiness.		Substitute service.	
			1898.	1897.	1898.	1897.
September	97.8	.....	43	39	2.5	2
October	94.3	8	209	184	70.5	46
November	94.6	5	196	174	50.5	73.5
December	93.3	13	183	194	69	15
January	93	21	233	296	92.5	98
February	93.3	15	212	153	51.5	49.5
March	93.3	6	191	191	83	69.5
April	91.7	13	206	175	63.5	61.5
May	92.8	7	158	183	65	54.5
June	94 6	6	96	115	45.5	54
Total	.....	94	1,727	1,704	593.5	523.5

TABLE VI.—*Showing the number of graduates from the Washington Normal School, from other normal schools, from colleges, and nongraduates.*

Washington Normal School	70
Other normal schools	2
Colleges	1
Nongraduates	20
Total	93

FOURTH DIVISION.

TABLE I.—*Showing distribution of schools by buildings.*

School.	Eighth grade.	Seventh grade.	Sixth grade.	Fifth grade.	Fourth grade.	Third grade.	Second grade.	First grade.	Total.	Schoolrooms.	Number of teachers.
Jefferson	2	2	3	3	2	2	2	2	18	19	18
Amidon	.....	.....	1	1	1	1	2	2	8	8	8
Bradley	1	1	1	1	1	1	1	2	9	8	9
Smallwood	1	1	1	1	2	2	1	1	10	8	10
Greenleaf	.....	1	1	1	1	1	3	4	12	8	12
Potomac	.....	.....	.....	.....	1	1	1	1	4	3	4
Total number of schools:											
1898	4	5	7	7	8	8	10	12	61	54	61
1897	4	5	7	7	7	8	9	12	59	54	59

TABLE II.—*Showing condition of buildings.*

Building.	How heated.	Light.	Ventilation.	Water-closets.	Play rooms.	Yards.	Owned or rented.
Jefferson	Steam	Excellent	Fair	Excellent	Excellent	Excellent	Owned.
Amidon	Furnace	do	Excellent	do	do	Small	Do.
Bradley	do	do	do	Fair	Small	do	Do.
Smallwood	do	do	do	do	do	do	Do.
Greenleaf	do	do	do	Excellent	do	do	Do.
Potomac	Stoves	do	Fair	Poor	None	do	Do.

TABLE III.—*Showing half-day schools.*

School.	Half-day schools.		Grades of half-day schools.
	1898.	1897.	
Jefferson	.....	.....	.....
Amidon	.....	.....	.....
Bradley	2	2	1, 1.
Smallwood	4	2	1, 2, 3, 3.
Greenleaf	8	6	1, 1, 1, 1, 2, 2, 2, 3
Potomac	.....	2	.....
Total	14	12	.....

TABLE IV.—*Showing distribution of pupils by grades, attendance, and average per teacher.*

Grade.	Number of schools.		Whole enrollment.		Average enrollment.		Average daily attendance.		Average number of pupils per teacher.	
	1898.	1897.	1898.	1897.	1898.	1897.	1898.	1897.	Based on whole enrollment.	Based on average enrollment.
Eighth	4	4	195	184	166	162	157	156	48.7	41.5
Seventh	5	5	197	206	174	184	163	175	39.4	34.8
Sixth	7	7	329	307	273	256	256	239	47	39
Fifth	7	7	343	349	309	309	286	290	49	44.1
Fourth	8	7	374	351	332	312	307	294	53.4	47.4
Third	8	8	411	408	372	359	347	334	51.4	46.5
Second	10	9	484	413	424	367	393	345	53.8	47.1
First	12	12	633	679	495	542	454	493	52.7	41.2
Total	61	59	2,966	2,897	2,545	2,491	2,363	2,326	48.6	41.7

TABLE V.—*Showing percentage of attendance, cases of tardiness of pupils, and absence and tardiness of teachers.*

Month.	Percentage of attendance.	Tardiness of teachers.	Cases of tardiness.		Substitute service.	
			1898.	1897.	1898.	1897.
September	96.8	5	38	57	2	5.5
October	93.7	10	180	266	23	45.5
November	94.6	11	212	203	16.5	70
December	92.6	14	169	250	31.5	51.5
January	93.3	14	268	347	16.5	42.5
February	92.7	4	233	189	28	28
March	93	7	186	257	37	46.5
April	91.2	10	212	267	18.5	47
May	92	13	199	213	52.5	38
June	93.6	7	109	154	26	9
Total		95	1,806	2,203	215.5	383.5

TABLE VI.—*Showing the number of graduates from the Washington Normal School, from other normal schools, from colleges, and nongraduates.*

Washington Normal School	32
Other normal schools	10
Colleges	2
Nongraduates	17
Total	61

FIFTH DIVISION.

TABLE I.—*Showing location of buildings and distribution of schools.*

Name and location.	Eighth grade.	Seventh grade.	Sixth grade.	Fifth grade.	Fourth grade.	Third grade.	Second grade.	First grade.	Total.	Schoolrooms.	Number of teachers.
Jackson, U street, between 30th and 31st streets	2	1	2	2	1	.....	.....	.....	8	8	8
Grant, G street, between 21st and 22d streets	2	1	2	2	2	2	2	3	16	14	16
Addison, P street, between 32d and 33d streets	1	1	1	1	1	1	1	2	9	8	9
Fillmore, 35th street, between U and V streets	1	1	1	1	1	1	1	1	8	8	8
Weightman, 23d and M streets	1	1	1	1	1	1	2	2	10	8	10
Corcoran, 28th street, between Olive and M streets	.....	1	1	1	1	1	1	2	8	8	8
Threlkeld, 36th street and Prospect avenue	.....	.....	.....	1	1	1	1	1	5	4	5
High Street, corner of 32d and S streets	.....	.....	.....	.....	1	1	1	1	4	4	4
Blunt, 3017 O street	.....	.....	.....	.....	.....	1	1	1	3	3	3
Birch, 2819 P street	.....	.....	.....	.....	1	1	1	.....	3	3	3
Industrial Home, Wisconsin avenue	.....	.....	.....	2-5	.....	.....	.....	1	2	2	2
Whole number of schools:											
1898	7	6	8	10	10	10	11	14	76	70	76
1897	6	7	8	10	9	10	11	13	74	69	74

TABLE II.—*Showing the condition of buildings.*

Building.	How heated.	Light.	Ventilation.	Water-closets.	Play-rooms.	Yards.	Owned or rented.
Jackson	Furnace	Excellent.	Excellent.	Excellent.	Excellent.	Good	Owned.
Grant	Steam	do	do	do	do	do	Do.
Addison	Furnace	do	do	do	do	do	Do.
Weightman	do	do	do	do	do	do	Do.
Corcoran	do	do	do	do	do	do	Do.
Threlkeld	Stoves	do	Fair	Fair	Poor	do	Do.
High Street	do	do	Poor	Poor	do	Fair	Do.
Blunt	Furnace	do	do	Fair	do	Good	Rented.
Birch	do	do	do	Poor	do	Excellent.	Do.
Industrial Home.	Steam	do	do	Good	do	do	Owned.
Fillmore	Furnace	do	Excellent.	Excellent.	Excellent.	do	Do.

TABLE III.—*Showing half-day schools.*

Name of school.	Half-day schools.		Grade of half-day schools.
	1898.	1897.	
Grant	6	6	1, 2
Weightman	4	4	1, 2
Addison	2	2	1
Threlkeld	2	.....	1, 2
Total	14	12	.....

TABLE IV.—*Showing the distribution of pupils, by grades, and the average number per teacher.*

Grade.	Number of schools.		Whole enrollment.		Average enrollment.		Average daily attendance.		Average number per teacher.	
	1898.	1897.	1898.	1897.	1898.	1897.	1898.	1897.	Based on whole enrollment.	Based on average enrollment.
Eighth	7	6	311	260	236.3	208.6	221.2	193.4	44.4	33.7
Seventh	6	7	282	292	242.3	253	225.6	237	47	40.3
Sixth	8	8	343	356	298.8	305	273.6	283	42.8	37.3
Fifth	10	10	444	501	407.6	422	385.3	395	44.4	40.7
Fourth	10	9	431	430	372.5	376	348.1	352	43.1	37.2
Third	10	10	386	416	329.9	355	306	310	38.6	32.9
Second	11	11	469	416	414.5	350	380.7	325	42.4	37.5
First	14	13	692	639	519.8	497	473.8	453	49.4	37.1
Total	76	74	3,358	3,310	2,821.7	2,766.6	2,614.3	2,584.4	44	37

TABLE V.—*Showing percentage of attendance and cases of tardiness of pupils and absence and tardiness of teachers.*

Month.	Percentage of attendance.	Tardiness of teachers.	Cases of tardiness.		Substitute service.	
			1898.	1897.	1898.	1897.
September	97.0	1	119	78	1	1
October	93.6	19	422	422	17	15
November	93.4	29	535	410	34	12½
December	92.2	30	522	434	18½	20
January	91.7	22	523	611	67	37½
February	92.1	19	480	403	72	31
March	92.6	17	513	472	42	36½
April	91.0	13	466	479	36½	34
May	91.2	10	501	347	44	12
June	93.2	8	265	251	28½	14½
Total	.....	168	4,346	3,907	360½	214

TABLE VI.—*Showing the number of graduates from the Washington Normal School, from other normal schools, from colleges, and nongraduates.*

Washington Normal School	56
Other normal schools	1
Colleges	3
Nongraduates	16
Total	76

SIXTH DIVISION.

TABLE I.—*Showing location of buildings and distribution of schools by buildings.*

School.	Eighth grade.	Seventh grade.	Sixth grade.	Fifth grade.	Fourth grade.	Third grade.	Second grade.	First grade.	Total.	Schoolrooms.	Number of teachers.
Gales, 1st and G streets nw	1	1	2	1, 4–5	1	2	2	2	13	*a* 12	13
Arthur, Arthur place nw	1	1	1	1	1	1	1	2	9	8	9
Blake, North Capitol street, between K and L streets nw	1	1	1	1	1	1	2	2	10	8	10
Hayes, 5th and K streets ne	1	1	1	1	1	1	1	2	9	8	9
Blair, I street, between 6th and 7th streets ne	1	1	1	2	1	1	1	1	9	8	9
Blair annex, 8th and I streets ne			1						1	1	1
Taylor, 7th street near G street ne	1	1	1	1	1	2	2	2	11	8	11
Taylor annex, 8th street, between F and G streets ne					1				1	1	1
Madison, 10th and G streets ne		1	1	1	2	2	2	2	11	8	11
Pierce, G and 14th streets ne	1	1	1	1	1	2–3	2	3	11	8	11
Pierce annex, Maryland avenue, near 14th street ne						2			2	1	2
Hamilton, Bladensburg road, county	5–8				3–4		1–2	1	4	4	4
Langdon, Langdon, D. C		4–7				1–3			2	2	2
Whole number of schools:											
1898	8	9	10	10	11	14	14	17	93	76	93
1897	7	8	10	10	11	11	16	15	88	70	88

a Including one used for manual training.

TABLE II.—*Showing condition of buildings.*

Building.	How heated.	Light.	Ventilation.	Water-closets.	Play rooms.	Yards.	Owned or rented.
Gales	Steam	Excellent	Good	Excellent	Fair	Parking *a*	Owned.
Arthur	Furnaces	do	Excellent	do	Excellent	Ample	Do.
Blake	do	do	Good	do	do. *b*	do	Do.
Hayes	do	do	Excellent	do	do	Boys', ample; girls', small.	Do.
Blair	do	do	do	do	do	do	Do.
Blair annex	Stoves	Fair	Poor	Fair	None	None	Rented.
Taylor	Furnaces	Excellent	Excellent	Excellent	Excellent *c*	Ample	Owned.
Taylor annex	Stoves	Fair	Poor	Fair	None	Excellent	Rented.
Madison	Furnaces	Excellent	Excellent	Excellent	Excellent	Small	Owned.
Pierce	do	do	do	do	do	Girls', ample; boys', small.	Do.
Pierce annex	Stoves	Good	Poor	Poor	None	Small	Rented.
Hamilton	do	Fair	Fair	Privies	do	Ample	Owned.
Langdon	do	Excellent	Excellent	do	Fair	do	Do.

a The light in front rooms better than that in rear ones.
b Boys' play room now used for storage of fuel.
c Girls' play room now used as a cooking school.

TABLE III.—*Showing half-day schools.*

School.	Half-day schools.		Grade of half-day schools.	Number above second grade.	
	1898.	1897.		1898.	1897.
Gales	4	4	1, 2		
Arthur	2	4	1		
Blake	4	4	1, 2		
Hayes	2		1		
Blair	2	6	1, 2		2
Blair annex		2			2
Taylor	6	6	1, 2, 3	2	2
Taylor annex					
Madison	6	4	1, 2, 3	2	
Pierce	6	8	1, 2, 2–3	1	2
Pierce annex	2	2	3	2	2
Hamilton					
Langdon					
Total	34	40		7	10

TABLE IV.—*Showing distribution of pupils by grade, attendance, and average number per teacher.*

Grade.	Number of schools.		Whole enrollment.		Average enrollment.		Average daily attendance.		Average number of pupils per teacher.	
	1898.	1897.	1898.	1897.	1898.	1897.	1898.	1897.	Based on whole enrollment.	Based on average enrollment.
Eighth	7	7	390	321	284	275	270	259	49.5	40.5
Seventh	8	7	363	328	307	277	289	260	45.3	38.3
Sixth	10	9	469	415	401	350	374	328	46.9	40.1
Fifth	10	10	474	498	400	423	373	390	47.4	40
Fourth	10	10	488	463	422	409	393	379	48.8	42.2
Third	12	10	608	495	521	423	472	391	50.6	43.4
Second	14	15	597	616	510	517	465	474	42.6	36.4
First	16	15	853	760	624	574	562	519	53.1	39
Total	87	83	4,242	3,896	3,469	3,248	3,198	3,000	46.9	39.8
County schools	6	5	226	207	174	150	154	135	37.6	29
Grand total	93	88	4,468	4,103	3,643	3,398	3,352	3,135	48	39.1

TABLE V.—*Showing percentage of attendance, cases of tardiness of pupils, and absence and tardiness of teachers.*

Month.	Percentage of attendance.	Tardiness of teachers.	Cases of tardiness.		Substitute service.	
			1898.	1897.	1898.	1897.
September	97.1	0	129	110	20	1
October	92.2	8	438	398	44	18
November	91.3	9	573	409	9	26.5
December	91.8	9	473	384	15	17.5
January	91.6	9	543	514	17.5	52.5
February	91.8	10	471	314	15	33.5
March	92.2	8	455	452	8.5	43
April	90.4	3	402	520	44.5	48
May	90.1	11	318	455	27.5	47.5
June	93.6	9	266	317	12	25
Total		76	4,068	3,873	213	313

TABLE VI.—*Showing the number of graduates from Washington Normal School, from other normal schools, from colleges, and nongraduates.*

Washington Normal School	73
Other normal schools	8
Colleges	0
Nongraduates	12
Total	93

SEVENTH DIVISION.

TABLE I.—*Showing location of buildings and distribution of schools by buildings.*

School.	Eighth grade.	Seventh grade.	Sixth grade.	Fifth grade.	Fourth grade.	Third grade.	Second grade.	First grade.	Total.	Schoolrooms.	Number of teachers.
WHITE.											
Reservoir, near Conduit road	.....	.....	.....	.....	4–6	.....	1–2	....	2	4	2
Conduit road, near distributing reservoir	.....	.....	.....	.....	.....	.....	1–2	....	1	1	1
Tenley, Tenley, D. C	7–8	.....	1	1	1	1	1	1	7	*a* 8	7
Chevy Chase, Chevy Chase, D. C	.....	.....	.....	1–5	.....	.....	.....	....	1	4	1
Brightwood, Brightwood, D. C	1	6–7	.....	4–5	3–4	.....	2–3	1	6	*b* 8	6
Johnson, Mount Pleasant, D. C	1	1	1	1	1	1	1–2 1	1	9	8	9
Johnson Annex, Mount Pleasant, D. C	.....	1	.....	.....	.....	3–4	.....	....	2	*b* 4	*c* 2
Monroe, Steuben street nw., between Brightwood and Sherman avenues	7–8	.....	5–6	.....	1	1	1	1	6	8	6
Woodburn, Blair and Riggs roads	.....	6–8	.....	.....	4–5	.....	2–3	1	4	4	4
Brookland, Brookland, D. C	7–8	.....	5–6	.....	4–5	1	1	2	7	*d* 8	7
Whole number of schools:											
1898	5	4	4	4	7	5	9	7	45	57	45
1897	4	4	3	5	5	5	6	7	39	45	39
COLORED.											
Chain Bridge road, near Conduit road, D. C	.....	.....	.....	.....	.....	3–5	.....	....	1	1	1
Grant road, near Tenley, D. C	.....	4–7	.....	.....	.....	2–3	.....	1	3	2	3
Military road, near Brightwood, D. C	.....	.....	4–7	.....	.....	1–3	.....	....	2	2	2
Wilson, Central avenue nw., between Erie and Superior streets	.....	7–8	5–6	.....	1	1	1	2	7	8	7
Orphans' Home, Eighth street extended	.....	.....	.....	3–5	.....	.....	1–2	....	2	2	2
Mott, Sixth and Trumbull streets nw	1	1	1	1	2	1	2	3	12	*d* 10	12
Fort Slocum, Blair road	.....	.....	.....	.....	1–5	.....	.....	....	1	1	1
Ivy City, Ivy City, D. C	.....	.....	.....	3–5	.....	.....	1–2	....	2	2	2
Whole number of schools:											
1898	1	3	3	3	4	5	5	6	30	28	30
1897	1	3	3	2	4	6	5	5	29	28	29

a One room used for cooking school.
b One room used for manual training school and one for cooking school.
c Including one special teacher of drawing.
d One room used for manual training.

TABLE II.—*Showing condition of buildings.*

Building.	How heated.	Light.	Ventilation.	Water-closets.	Play rooms.	Yards.	Owned or rented.
Reservoir	Stoves	Good	Poor	Fair	Poor	Poor	Owned.
Conduit Road	do	Fair	do	do	None	do	Do.
Chain Bridge Road.	do	do	do	Good	do	Good	Do.
Tenley	Steam	Excellent	Excellent	do	Good *b*	Excellent	Do.
Chevy Chase	Stoves	Good	Poor	do	do	Good	Do.
Grant Road	do	Fair	do	Excellent	None	do	Do.
Military Road	do	do	do	do	do	Excellent	Do.
Brightwood	Steam	Excellent	Excellen	do	Excellent	Fair	Do.
Johnson	Furnace	do	do	do	do	do	Do.
Johnson Annex	Stoves	Fair	Poor	do	None	do	Do.
Wilson	Furnace	Excellect	Excellent	do	Excellent	Poor	Do.
Orphans' Home	do	do	Good	Good	do	Good	(*c*)
Mott	Stoves	Good *a*	Poor	Excellent	None	Fair	Owned.
Monroe	Furnace	Excellent	Excellent	do	Excellent	do	Do.
Fort Slocum	Stoves	Fair	Poor	do	None	Excellent	Do.
Woodburn	do	Excellent	Fair	Good	Excellent	do	Do.
Brookland	Steam	do	Excellent	Fair	do	Poor	Do.
Ivy City	Stoves	Good	Poor	Good	None	do	Do.

a Except two rooms in which the light is poor. *b* The boys' play room is used for storing fuel.
c Neither owned nor rented.

TABLE III.—*Showing half-day schools.*

School.	Half-day schools.		Grade of half-day schools.	Number above second grade, 1898.
	1898.	1897.		
Grant Road	2	2	1, 2, 3	1
Johnson	2		1, 2	
Mott	6	6	1, 2, 3	1
Wilson	2		1	
Total	12	8		2

TABLE IV.—*Showing distribution of pupils by grades, attendance, and average number per teacher.*

Grade.	Number of schools.		Whole enrollment.		Average enrollment.		Average daily attendance.		Average number of pupils per teacher.	
	1898.	1897.	1898.	1897.	1898.	1897.	1898.	1897.	Based on whole enrollment.	Based on average enrollment.
WHITE.										
Eighth	5	4	201	162	169	139.3	156.8	128	40.2	33.8
Seventh	3	4	127	154	108.8	129.8	98.1	116.9	42.3	36.2
Sixth	4	3	186	128	160	113	142	104	46.5	40
Fifth	4	5	179	216	139	184	126	168.6	44.7	34.7
Fourth	7	5	342	215	280	165	255.3	152.2	48.8	40
Third	5	5	215	222	178.7	189.9	165.2	171.9	43	35.7
Second	9	6	441	287	361	254.1	321	234	49	40.1
First	7	7	383	396	274	295.7	238.9	250.5	54.7	39.1
Total *a*	44	39	2,074	1,780	1,670.5	1,470.8	1,503.3	1,326.1	47.1	37.9

a Including 19 ungraded schools.

TABLE IV.—*Showing distribution of pupils by grades, attendance, and average number per teacher*—Continued.

Grade.	Number of schools.		Whole enrollment.		Average enrollment.		Average daily attendance.		Average number of pupils per teacher.	
	1898.	1897.	1898.	1897.	1898.	1897.	1898.	1897.	Based on whole enrollment.	Based on average enrollment.
COLORED.										
Eighth	1	1	42	32	30	25	27	23	42	30
Seventh	3	3	103	102	84.6	85.5	78.1	78.7	34.3	28.2
Sixth	3	3	114	127	85	90	79.6	82	38	28.3
Fifth	3	2	121	84	93	70	88	67	40.3	31
Fourth	4	4	218	203	161.1	157.7	149.2	147.3	54.5	40.2
Third	5	6	276	294	214.4	223.9	196.8	202.3	55.2	42.8
Second	5	5	253	239	196.8	181.7	185.7	172	50.6	39.3
First	6	5	349	323	216	189.8	197	177.1	58.1	36
Total *a*	30	29	1,476	1,404	1,080.9	1,023.6	1,001.4	949.4	49.2	36
Grand total	74	68	3,550	3,184	2,751.4	2,494.4	2,504.7	2,275.5	47.9	37.1

a Including 12 ungraded schools.

TABLE V.—*Showing percentage of attendance, cases of tardiness of pupils, and absence and tardiness of teachers.*

Month.	Percentage of attendance.	Tardiness of teachers.	Cases of tardiness.		Substitute service.	
			1898.	1897.	1898.	1897.
WHITE.						
September	96.7	3	80	29	2.5	1
October	91.3	8	187	185	10	8.5
November	90.5	12	227	220	27	6.5
December	88.4	15	265	222	14.5	5.5
January	89.7	26	359	273	19	16
February	88.2	18	281	206	60	14
March	90.7	19	230	239	18.5	16
April	87.8	11	224	250	13	23.5
May	89.6	16	247	263	5.5	28
June	91.4	16	156	114	6	12
Total	.....	144	2,256	2,001	176	131
COLORED.						
September	97.2	.....	2	8	.....	.....
October	94	3	68	85	5	4
November	93.1	1	91	111	10	4.5
December	91.1	3	90	124	16	2.5
January	92.5	10	90	119	9.5	3
February	91.7	7	87	93	2.5	11
March	91.9	.....	60	87	1.5	8
April	89.8	3	60	81	1	3
May	91.4	.....	74	59	8.5	.....
June	94.6	2	33	41	1	.....
Total	.....	29	655	808	55	36
Grand total	.....	173	2,911	2,809	231	167

TABLE VI.—*Showing number of graduates from Washington Normal School, from other normal schools, from colleges, and nongraduates.*

White:	
Washington Normal School	32
Other normal schools	5
Colleges	1
Nongraduates	8
Total	46
Colored:	
Washington Normal School (ninth, tenth and eleventh divisions)	20
Other normal schools	6
Colleges	4
Nongraduates	0
Total	30

EIGHTH DIVISION.

TABLE I.—*Showing location of buildings and distribution of schools, by buildings.*

School.	Eighth grade.	Seventh grade.	Sixth grade.	Fifth grade.	Fourth grade.	Third grade.	Second grade.	First grade.	Total.	Schoolrooms.	Number of teachers.
WHITE.											
Tyler, 11th street, between G and I se	1	1	1	1	1	1	2	2	10	8	10
Buchanan, E street, between 13th and 14th se	....	....	1	1	2	1	1	1	7	8	7
Cranch, 12th and G se	....	....	....	1	1	2	1	2	7	6	7
Benning, Benning, D. C	....	6–8	....	4–5	....	2–3	....	1	4	4	4
Congress Heights, Congress Heights, D. C	....	6–8	....	4–5	....	2–3	....	1	4	10	4
Good Hope, Good Hope, D. C	....	....	4–6	....	....	2–3	....	1	3	2	3
Van Buren, Anacostia, D. C	1	....	1	1	1	1	2	3	10	8	10
Van Buren Annex, Anacostia, D. C	....	1	....	1	1	1	....	....	4	*a* 6	4
Twining City, Twining City, D. C	....	....	....	....	....	....	1, 2	....	1	1	1
Anacostia Road, near Benning, D. C	....	....	....	....	....	....	....	....	....	*b* 1	....
Whole number of schools:											
1898	2	4	4	7	6	9	7	11	50	54	50
1897	2	3	4	6	6	8	7	12	48	49	48
COLORED.											
Benning Road, near Benning, D. C	....	5–7	....	....	....	....	1–2	....	2	2	2
Benning Road Annex, near Benning, D. C	....	....	....	....	3–4	....	....	....	1	*b* 2	1
Birney, Howard avenue, Hillsdale, D. C	1	....	....	....	....	2	2	2	7	4	7
Burrville, Burrville, D. C	....	....	....	4–6	....	1–3	....	....	2	2	2
Garfield, Garfield, D. C	....	4–7	....	....	....	1	1	1	4	6	4
Hillsdale, Hillsdale, D. C	....	6–7	....	1	1	....	....	1	4	*a* 6	4
Whole number of schools:											
1898	1	3	....	2	2	4	4	4	20	22	20
1897	1	3	....	1	3	3	5	3	19	22	19

a Two rooms occupied as carpentry and cooking laboratories, respectively.
b One room occupied as carpentry shop and cooking laboratory, jointly.

TABLE II.—*Showing the condition of buildings.*

Building.	How heated.	Light.	Ventilation.	Sanitaries.	Play-rooms.	Yards.	Owned or rented.
Tyler	Furnace	Excellent	Poor	Poor	Poor	Small	Owned.
Buchanan	do	do	do	Fair	do	do	Do.
Cranch	Steam	Poor *a*	None	Poor	do	do	Do.
Van Buren	Furnace	Excellent	Poor	do	do	do	Do.
Van Buren Annex	Stoves	Fair *b*	None	None	None		Do.
Birney	do	Excellent	do	Very poor	do	Good	Do.
Hillsdale	do	Poor *c*	do	do	do	None	Do.
Congress Heights	Furnace	Excellent	do	do	Poor	Good	Do.
Garfield	Stoves	Poor *d*	do	do	None	do	Do.
Good Hope	do	Excellent	Poor	do	do	Poor	Do.
Twining City	do	Very poor	None	do	do	None	Rented.
Benning Road	do	Excellent	Poor	do	do	Poor	Owned.
Benning Road Annex	do	Very poor	None	do	do		Do.
Benning	do	Excellent	Poor	do	do	Good	Do.
Burrville	do	Poor	Fair	do	do	Poor	Do.
Anacostia Road *e*	do	do	None	do	do	Good	Do.

a Except two third-floor rooms, where the light is very poor.
b Except two rooms, in which the light is good.
c Except three rooms, in which the light is fair.
d Except two rooms, in which the light is excellent.
e Occupied by carpentry and cooking schools.

TABLE III.—*Showing half-day schools.*

School.	Half-day schools.		Grades of half-day schools.	Number above second grade.	
	1898.	1897.		1898.	1897.
Tyler	4	4	1, 1, 2, 2		
Cranch	3	4	1, 1, 2		
Birney	5	2	1, 1, 2, 3, 3	2	
Hillsdale	2	2	1, 2		
Congress Heights	1	2			1
Good Hope	2	2	1, 2–3	1	1
Van Buren	5	2	1, 1, 1, 2, 2		
Total	22	18		3	2

TABLE IV.—*Showing distribution of pupils by grades, attendance, and average number per teacher.*

Grade.	Number of schools.		Whole enrollment. *a*		Average enrollment.		Average daily attendance.		Average number of pupils per teacher. *b*	
	1898.	1897.	1898.	1897.	1898. *a*	1897. *b*	1898.	1897. *b*	Based on whole enrollment.	Based on average enrollment.
WHITE.										
Eighth	2	2	115	103	91	85	86	82	48	38
Seventh	2	2	137	140	107	92	102	86	55	53
Sixth	3	3	191	182	160	115	149	108	49	41
Fifth	5	4	271	233	232	164	215	155	44	38
Fourth	6	6	331	311	287	228	263	212	45	39
Third	6	6	365	339	318	246	294	227	52	44
Second	6	6	389	369	341	267	315	247	49	43
First	11	12	564	553	457	406	410	367	48	38
Total	*a* 50	*a* 48	2,363	2,230	1,993	1,603	1,834	1,484	49	42
COLORED.										
Eighth	1	1	37	33	32	27	30	26	37	32
Seventh	.....	.....	49	37	36	34	34	30	.....	.....
Sixth	.....	.....	56	67	49	32	45	29	.....	.....
Fifth	1	1	89	86	72	41	68	38	51	44
Fourth	1	1	104	102	89	77	83	70	59	47
Third	3	3	156	154	126	145	115	133	39	31
Second	3	4	178	157	137	138	126	122	43	36
First	4	4	267	304	199	170	184	156	56	40
Total	*a* 20	*a* 19	936	940	740	664	685	604	48	38
Grand total	*a* 70	*a* 67	3,299	3,170	2,733	2,267	2,519	2,008	49	40

a Including ungraded schools. *b* Excluding ungraded schools.

TABLE IV, SUPPLEMENT.—*Number of ungraded schools.*

Grades.	White.		Colored.	
	1898.	1897.	1898.	1897.
Eighth, seventh, and sixth	2	1	.....	.....
Seventh and sixth	.....	.....	1	1
Seventh, sixth, and fifth	.....	.....	1	1
Seventh, sixth, fifth, and fourth	.....	1	1	1
Sixth, fifth, and fourth	1	1	1	1
Fifth and fourth	2	1	.....	.....
Fourth and third	.....	.....	1	1
Third and second	3	3	.....	.....
Third, second, and first	.....	.....	1	1
Second and first	1	.....	1	1
Total	9	7	7	7

TABLE V.—*Showing percentage of attendance, cases of tardiness of pupils, and absence and tardiness of teachers.*

Month.	Percentage of attendance.	Tardiness of teachers.	Cases of tardiness.		Substitute service.	
			1898.	1897.	1898.	1897.
WHITE.						
September	96.5	1	30	29	4	1
October	92.2	10	124	185	9.5	8.5
November	93.7	8	160	220	13	6.5
December	91.3	6	148	222	9.5	5.5
January	91.3	35	209	273	18	16
February	91.1	11	193	206	26	14
March	92.9	17	187	239	48	16
April	90.1	10	166	250	22.5	23.5
May	91.6	12	156	263	15	28
June	92.7	14	115	114	34	12
Total	.....	124	1,488	2,001	199.5	131
COLORED.						
September	96.1	.....	37	8	.5	.....
October	92.8	2	84	85	9	4
November	92.6	1	102	111	15.5	4.5
December	90.3	.....	72	124	0	2.5
January	92.5	5	98	119	4.5	3
February	91.9	1	76	93	6	11
March	92.9	.....	71	87	1	8
April	90	.....	69	81	4	3
May	91	2	64	59	10	.....
June	92.2	3	35	41	3.5	.....
Total	.....	14	708	808	54	36
Grand total	.....	138	2,196	2,809	253.5	167

TABLE VI.—*Showing the number of graduates from the Washington Normal School, from other normal schools, from colleges, and nongraduates.*

White—	
Washington Normal School	34
Other normal schools	5
Colleges	2
Nongraduates	9
Total	50
Colored—	
Washington Normal School (ninth, tenth and eleventh divisions)	14
Other normal schools	2
Colleges	2
Nongraduates	2
Total	20

HIGH SCHOOL REPORT, 1897-98.

CENTRAL HIGH SCHOOL.

Numbers and attendance, 1896–1898.

Number of pupils admitted from previous year	506
Number admitted at the beginning of the year	444
Number subsequently admitted	44
Number of withdrawals	239
Number at the close of the year	742
Whole number enrolled (girls, 548; boys, 446)	994
Average number enrolled	864.5
Average number in daily attendance	813
Percentage of attendance	94.09

Year 1897–98.

Month.	Average enrollment.	Average attendance.	Percentage.
September	903.4	885.6	98
October	943.2	900.8	95.4
November	912.8	869	94.4
December	921.4	856.8	92.9
January	893.4	834	93.3
February	859.1	802.3	93.3
March	833.4	779.6	93.5
April	853.9	782.4	91.8
May	806.4	752.8	93.3
June	762.1	732.4	95

Table showing growth of school.

Year.	Number of teachers.	Average enrollment.	Year.	Number of teachers.	Average enrollment.
1882–83	11	367	1890–91 a	36	1,001
1883–84	13	486	1891–92	37	937
1884–85	20	598	1892–93	39	778
1885–86	24	688	1893–94	42	835
1886–87	28	775	1894–95	43	894
1887–88	30	913	1895–96	42	814
1888–89	33	1,107	1896–97	44	851
1889–90	41	1,274	1897–98	43	864.5

a Decrease accounted for by establishment of branches at Georgetown and Capitol Hill.

EASTERN HIGH SCHOOL.

Numbers and attendance, 1897–98.

Number readmitted from previous year	322
Number admitted at beginning of year	155
Number subsequently admitted	44
Number of withdrawals	132
Number at the close of the year	388
Whole number enrolled (girls, 313; boys, 198)	511
Average number enrolled	445
Average number in daily attendance	415
Percentage of attendance	93.2

Year 1897–98.

Month.	Average enrollment.	Average attendance.	Percentage.
September	463.3	452.8	97.7
October	467.3	443	94.8
November	469.4	445.9	94.9
December	465.4	432.8	93
January	460.3	427.6	92.8
February	451.9	421	93.1
March	438.5	408.6	93.1
April	427.8	388.8	90.8
May	412.1	377.1	91.5
June	389.6	357.4	91.7

MISCELLANEOUS STATISTICS.

Number in each course, by years.

Fourth year (scientific, 14; academic, 40)	54
Third year (scientific, 17; academic, 59)	76
Second year (scientific, 33; academic, 82)	115
First year (scientific, 59; academic, 121)	180
Total number in the scientific course	123
Total number in the academic course	302
Special students	61

Number of graduates.

1892–93.	Boys, 31; girls, 37	68
1893–94.	Fourth year (boys, 5; girls, 6)	11
	Third year (boys, 29; girls, 48)	77
	Total	88
1894–95.	Fourth year (boys, 9; girls, 16)	25
	Third year (boys, 25; girls, 31)	56
	Total	81
1895–96.	Fourth year (boys, 8; girls, 23)	31
	Third year (boys, 0; girls, 1)	1
	Total	32
1896–97.	Fourth year (boys, 10; girls, 34)	44
1897–98.	Fourth year (boys, 18; girls, 34)	52

Table showing growth of school.

Year.	Number of teachers.	Average enrollment.	Year.	Number of teachers.	Average enrollment.
1890-91	7	158	1894-95	19	393.2
1891-92	11	239	1895-96	21	394.4
1892-93	15	329	1896-97	21	401
1893-94	17	366	1897-98	21	445

BUSINESS HIGH SCHOOL.

Numbers and attendance, 1897-98.

Maximum enrollment (October)	559
First year (boys, 193, girls, 197)	390
Second year (boys, 76; girls, 93)	169
Enrollment at the end of the year	365
Average enrollment	483
Average attendance	453
Average per cent of attendance	93.7
Average age of first-year pupils at entrance	16.7

Year 1897-98.

Month.	Average enrollment.	Average attendance.	Percentage.
September	529	515	97.3
October	552	525	95.1
November	543	516	95.0
December	507	468	92.3
January	513	478	93.1
February	493	463	93.8
March	474	440	92.6
April	440	398	90.4
May	419	389	92.6
June	358	333	93.0

Table showing growth of school.

Year.	Number of teachers.	Average enrollment.	Number of graduates.	Entering age.
1890-91	8	274	0	16.4
1891-92	9	329	35	16.3
1892-93	11	359	50	16.1
1893-94	12	410	60	16.3
1894-95	13	394	40	16.5
1895-96	17	421	71	16.5
1896-97	19	435	74	16.4
1897-98	20	483	89	16.7

WESTERN HIGH SCHOOL.

Numbers and attendance, 1897–98.

Number of pupils admitted from previous year	171
Number of new admissions	149
Number of withdrawals	78
Number of pupils at the end of the year	242
Whole number enrolled (girls, 180; boys, 140)	320
Average enrollment	290
Average number in daily attendance	276
Percentage of attendance	93.5

Year 1897–98.

Month.	Average enrollment.	Average attendance.	Percentage.
September	274.7	270.3	98.3
October	300.7	285.8	95
November	301.5	286.9	95.1
December	291.9	273.4	93.6
January	287.5	268.7	93.4
February	286.2	266.4	93
March	285.5	265.1	92.8
April	278.3	249.8	89.7
May	271.8	252	92.7
June	250.5	230.9	92.1

Table showing growth of school.

Year.	Teachers.	Enrollment.	Remarks.
1890–91	2	54	First-year pupils.
1891–92	4	104	First and second year pupils.
1892–93	7	156	First, second, and third year pupils.
1893–94	10	181.5	First, second, third, and fourth year pupils.
1894–95	11	199	Do.
1895–96	12	245	Do.
1896–97	14	231	Do.
1897–98	15	290	Do.

WESTERN HIGH SCHOOL.

In May the contractors completed their work on the new school and turned over to the building inspector of the District a house complete in many respects, but by no means ready for school use. The original appropriation had made it possible to provide in the third floor hardly more than rooms with four bare walls, destitute of plumbing and all fittings—shells out of which finely equipped laboratories and a modern gymnasium were to be constructed. In addition, furniture for teachers' use, suitable apparatus, and adequate conveniences were necessary throughout the building.

A special appropriation for the equipment of the school made it possible to supply all deficiencies of the original plans for construction and to furnish also all the conveniences of a modern building. It was

the policy of those having the equipment in charge to obtain every scientific improvement, every time and labor saving device, every assistance for improved work known to recent experience. It was evident that the small sum available would permit this policy, while it would not allow the expenditure of even trifling amounts for decoration and artistic adornment when separated from practical needs. As a consequence serviceability, school necessity, were made the ideas underlying all purchases.

To carry out these ideas and at the same time, without sacrifice of money, to secure surroundings that should be a lesson in æsthetic culture to students day by day, became the problem. There were many assistants with trained judgment and broad experience to render the solution less difficult. Through correspondence with those in charge of the scientific departments of other recently built schools, conferences with architects, plumbers, and cabinetmakers, even the seemingly insuperable obstacles to the construction of the laboratories were overcome. It is believed that, for the space given, little improvement could now be made either in the chemical laboratory and its adjuncts, the supply and demonstrating room, or in the suite devoted to biology. The rooms devoted to physics, including the conveniences for photography, leave little room for criticism.

Whatever could be done to improve the sanitation of the building or to better the means for pupils' physical culture has been provided through shower baths, individual lockers, lunch room, laboratories, and gymnasium. Whatever convenience could be secured to make the routine of a large school simple and easily handled has been provided through telephones, connecting all parts of the building with the principal's office, through electric bells, automatic programme clock, and many minor appliances.

In the library, drawing-room, and assembly hall it was possible to carry out a color scheme, resulting in most pleasing decorative effect. Selecting a quiet secondary color, the walls were given this tint and much of the furniture made to conform to it in color. Perhaps the most successful realization of this idea is to be seen in the assembly hall. Here all curtains, stage furniture, and even the 600 opera chairs, which give the strongest color note in the room, harmonize with the quiet, restful olive of the walls and ceiling.

It is hoped that this pioneer attempt in Washington to put in practice the theory that all school surroundings should inculcate daily a lesson of love of the beautiful, even to pupils who are unconscious of the influence, may have its fruition eventually in every school in the District. It is not enough that poorly calcimined walls should be adorned by a few splendid pictures, reproductions from the great painters. Our new buildings should be designed by expert architects, who shall put beauty into every line of their structure. Then with color harmonies and the charm of palms, casts, and pictures, the schools may really be made a lever to elevate the people in æsthetic knowledge and enjoyment.

COURSES OF STUDY OUTLINED.

YEAR.	Academic.	Scientific.	Technical. *a*	Short Technical. *a*	Business. *a*
FIRST.	English. History. Algebra. Latin.	English. History. Algebra. German or French.	English. French or German. Algebra. Manual Training. Drawing.	English. Algebra. Drawing. Manual Training. Physic.	English. Business Arithmetic. Bookkeeping. Penmanship. Shorthand. *Typewriting* or *Mechanical Drawing.*
SECOND.	English. English History. *Greek.* Geometry. Latin. Physics or Chemist .	English. English History. *French.* Geometry. German or French. Physics or Chemistry.	English. French or German. Physics. Geometry. Manual Training. Drawing.	English. Geometry. Chemistrtraining. Manual T Drawing.	English. Bookkeeping and Business Practice. Commercial Law and Commercial Geography. Shorthand. Typewriting. *Advanced Mechanical Drawing.*
THIRD.	English. Latin. *French.* *German.* *Greek.* *Biology* or *Chemistry* or *Advanced Physics.* *Political Economy.* *Trig'y* and *Surveying* or *History.*	English. German or French. *Biology* or *Chemistry* or *Advanced Physics.* *French.* *Political Economy.* *Trig'y* and *Surveying* or *History.*	English. *French* or *German.* *Physics* or *Chemistry.* Manual Training. Drawing. *Trigonometry* and *Surveying.*	The four years' shop work of the regular technical course is completed in two years.	Each year of this course is complete in itself.
FOURTH.	English. Latin. *Advanced Biology* or *Chemistry* and *Mineralogy* or *Physics.* *Greek.* *History.* *Analytical Geometry* and *College Algebra.* *French.* *German.* *Spanish.*	English. German or French. *Advanced Biology* or *Chemistry* and *Mineralogy* or *Physics.* *History.* *Analytical Geometry* and *College Algebra.* *French.* *Spanish.*	English. *French* or *German.* *Physics* or *Chemistry.* *Analytical Geometry* and *College Algebra.* Manual Training. Drawing. *Spanish.*		Students of the second year may substitute an equivalent amount of work in English and Shorthand for Bookkeeping, or in English and Bookkeeping for Shorthand.

a This course does not prepare for the Normal School.

Elective studies are printed in *italics;* all others are prescribed.

A general exercise in music is optional, except for normal-school candidates, for whom it is prescribed.

Drawing is prescribed for all pupils of the first and second years; also for normal-school candidates throughout the course.

Candidates for diplomas must pursue all the prescribed studies and at least four studies in every year. Students who, from any cause, fail to meet this requirement, are enrolled as "unclassified," and can not graduate until the prescribed work is satisfactorily made up.

Pupils who desire to prepare for college can make special arrangement of their courses upon written application to the principal. This must be done by pupils of the second year who elect Greek, or French of the scientific course.

CHEMISTRY.

To the pupils of the second, third, and fourth years of the high school chemistry is offered as an elective study. The course, as given, permits one, two, or three years of work in the subject; the terms "General chemistry," "Qualitative analysis," and "Quantitative analysis" outlining roughly the class of work carried on. In each year the time allotted is five hours per week, one hour per day, for the beginning pupils; one single and two double periods per week for the two advanced classes. More hours of work are, however, expected of both the qualitative and the quantitative students, as the laboratory work, which they do almost exclusively, requires no home preparation. In the beginners' classes no exact division of the time between the laboratory and the recitation room is possible; about one-half is, however, devoted to laboratory practice. The qualitative and quantitative pupils spend one period per week in the class room, the rest of the time in the laboratory.

In the first year of the course two aims are constantly held in view; first, the cultivation of habits of clear observation, correct analysis, independent logical reasoning, and scientific exactness; second, the imparting to the pupil of chemical knowledge. As the second of these purposes can be best subserved by careful attention to the first, a modified inductive system is used, the laboratory work preceding that of the recitation room, the student gaining his knowledge at first hand as far as possible. In the laboratory, on finishing an experiment, the pupil at once submits a written statement of his work to the instructor for criticism. A definite amount of work is every day required of the class, and extra series of parallel experiments furnish further practice for the brighter pupils. In the recitation room the questions deal largely with the laboratory work. Classification of the knowledge acquired from the beginning, frequent written reviews, questions on the application of chemistry to daily phenomena, and problems in stoichiometry, give breadth to the course. The ground covered during this year includes the study oı the nonmetals and the metals, together with elementary analysis of the first one or two qualitative groups. In the class room the text used is Storer and Lindsay's Manual of Chemistry; in the laboratory, the experiment sheets are prepared by the instructor.

In the second year of the course the aim is, primarily, to teach chemistry, secondarily to cultivate deftness, accuracy and self-reliance. The laboratory work is partly inductive, following methods devised by pupils, but amplified by the instructor. As in the previous year, a definite assignment of work is made to the class; the brighter pupils working beyond this limit obtain a fuller course. In the laboratory, on completing the qualitative tests of all the common metals, the pupil determines a number of unknown solutions. This is followed by a series of from fifteen to twenty-five estimations by "blowpipe" methods.

The latter half of the year is spent in qualitative analysis, by "dry" and "wet" processes, of substances, except phosphates, silicates, etc., soluble in water and acids. Although most of the common acids are determined, no course in systematic acid analysis is given. In the class room, recitations are held once per week, at first upon the laboratory work; later (about two-thirds of the year), upon organic chemistry. Laboratory work in this latter branch has rarely been permitted, owing to the limited amount of time at command. The manuals used in the laboratory are prepared by the instructor, Fresenius text being used for reference. The course in organic chemistry is that found in Storer and Lindsay's Manual of Chemistry, supplemented somewhat by the instructor.

In the third year of the course, primarily, scientific methods and habits of accuracy and patience are taught. As a secondary consideration, preparation for advanced work in chemistry is also sought, since most of the pupils who elect this course wish to enter college. The greater part of the time is given to quantitative analysis, mostly gravimetric, this work extending throughout the year. The "Exercises for practice" in Fresenius' Quantitative Analysis have been used as the basis of the work. All determinations must come within one-half per cent of the correct value. One period per week is devoted to other work, at first to lectures and recitations on the laboratory work; later, to a brief course in crystallography and determinative mineralogy, the purpose being to acquaint the pupil with most of the common ores and minerals.

DRAWING.

Though only two hours a week at most are devoted to this important branch, even in this short time much is accomplished in giving pupils a facility of hand in the execution of their own work and a broadening of the mind to an appreciation of the work of others and to the great beauties of nature.

Drawing is required for an hour each week of all the pupils in the first and second years, and two hours a week for four years for all technical and special pupils and for normal school candidates.

The special classes are a distinctive feature in the art work of the school and have proved of great service to numbers of pupils who have taken advantage of the privileges offered to fit themselves for further study in art and technical schools and for architectural and mechanical pursuits.

If for good reasons a pupil desires it, drawing may be made a major study (six hours a week), each course being planned with a view to individual needs.

The course for all the classes is as follows:

First and second year, regular classes, one hour a week; pencil sketching of objects and groups of objects. It has been found that the

pupils enjoy the sketching of objects which have color more than the white models, so that the use of the latter is only for illustration and suggestion.

Third and fourth year, normal school classes, two hours a week; one lesson, figure sketching on large pieces of paper and on blackboard, and one lesson in water-color painting. There are three important reasons why the study of color is good for teachers—it is a subject they will probably have to teach; it should make it impossible for them to wear or to countenance the glaringly inharmonious combinations sometimes worn in dress; and more than all else, there is a subtle pleasure in fine color, as there is in fine music, an appreciation of which gives a higher and finer enjoyment to life.

Technical classes, two hours a week; one lesson in charcoal, that being the medium which gives the finest artistic effects and trains the pupils to see the large masses of light and shade; first year, groups of still life; second year, casts of beautiful Greek and Gothic architectural forms, one lesson, pencil sketching; first year, the study of beautiful base forms; second year, machinery and parts of machines.

Technical classes, third and fourth years, charcoal work; more advanced study of heads, faces, hands, and the full-length figure from casts; one lesson in mechanical drawing; third year, orthographic projections, isometric projections and perspective; fourth year, shadows in projection and perspective, development of solids, and intersections of solids.

In the special classes, first and second years, the charcoal work is the same as in the technical sections, the pencil drawings being groups of still life, flowers, etc.

In the third and fourth years the special class work is elective, students continuing charcoal, study heads, faces, and full-length figures from casts; those who study color or pen and ink work with those mediums on groups of still life, flowers, etc.

Volunteer classes which stay after school for extra lessons are an important feature, there being one for charcoal sketching, life size, in one hour, of the head of someone who poses for the class; another class meets for the study of lettering, plain and fancy; and there are always the water-color classes.

MANUAL TRAINING.

AIMS OF THE WORK.

In the high-school grades of manual training the aim is to embody clearly the ideas which are fundamental in all grades of the work, viz, educational soundness as a means of general training, and that the training itself, as well as the knowledge incidental to it, shall be of real and permanent value. In these grades the latter requirements are purposely emphasized. The age and previous experience of the students make this purpose eminently proper; to aim at less would be to

miss the opportunity for which the preparation has been made in previous years. As now visible, the effect of this emphasis does not, it is believed, give the stickler for educational soundness nor the promoter of "practical education" reason for much criticism.

To be of real value the work must meet the needs of those to whom it is to be offered. The benefit of general training in self-mastery will accrue to all irrespective of the motives which lead students to take the work, meeting an urgent need, though one which is seldom recognized by the student and still less often influences his choice.

There are three classes of students who elect manual training: First, those who desire it either because they enjoy it, as recreation, or because, without very definite ideas about it, they think it is "good for them," but whose chief interest is in some other line of study. By these the work may be taken as an extra study for a minimum of two periods, one hour and forty minutes a week, through four years if desired. These students are enrolled in the academic and scientific courses. This plan is an ideal one in conception, inasmuch as it places manual training within reach of every boy in the school. In past years, when this plan was the only one in operation, there have been as many as 65 per cent of the total number in the school enrolled under it.

Second. There is a considerable number of boys whose mechanical tastes have been discovered to them during their grammar-school courses, who have developed ambitions to go to technological schools to fit themselves for some branch of engineering. These students require a closer acquaintance with materials, tools, and processes than can be acquired during two periods a week, hence they are given six. They are organized in a four-year course—the "Technical," which includes, in addition to the shop work, English, mathematics, modern languages, science, and drawing sufficient to prepare them for admission to the advanced institutions of their choice. The larger number of the mechanically inclined students of this class, while not expecting to go on to higher study, plan to remain four years in the high school, and consequently are advised to enroll in the technical course. It is probably the best general culture course for such as these, for their great interest in the shop work insures better effort upon other studies.

Third. There is a class of boys who come naturally together for different reasons. Some have no definite aim or ambition, but are sufficiently well to do to enable them to remain in school. Some are not attracted by the regular high-school studies, especially, perhaps, not by the languages. Still others there are to whom the expense of going to the high school means a corresponding sacrifice at home. The majority of this group either do not expect to take a four-year course or are in doubt of being able to do so. They are looking forward to some vocation as an early necessity, and naturally seek the course which appeals to them as being the most useful. There are obvious reasons why special arrangements should be made for the class of boys thus made up.

As a result of experience there was organized a two-year course which is similar to the technical, but with physics and chemistry substituted for the modern languages in the first and second years, respectively. The time devoted to manual training is doubled, making twelve periods a week, which increase enables the student to cover practically as much ground in two years as do the technical boys in four. For the class of boys considered the course is proving attractive, it having enrolled more students by far than was expected would be the case. Although it has not been long enough in operation to warrant a definite statement, it is likely that this short course is going to draw to a very encouraging extent from those boys who have heretofore left school at or near the end of the eighth grade in order to go to work. Many of these are very capable boys who are at just that stage of development when another year or two of carefully adapted school work may make a great difference in their future.

THE WORK.

It may be briefly stated that our shop work does not differ in kind from that of the typical American manual training high school. In reading the enumeration which follows it should be borne in mind that bench work in wood is taught in the seventh and eighth grades two hours a week.

Wood turning and pattern making constitute the work of the first year, forging and foundry work that of the second year, machine-shop work that of the third and fourth years. All these courses embrace mechanical drawing, closely related to the shop work, the time for which is included in that given—two, six, and twelve periods—as belonging to the different plans considered above.

The boys of the special, or two-year, course take the first four branches named in their first year and machine-shop work in the second. The first group of boys mentioned above, those taking the work but two periods a week, are given a shorter course in each kind of work, with the exception of pattern making, embracing the most fundamental and important principles. The boys of this class have been much crowded out of late to make room for those who make the shop instruction more of a feature of their work. While this has been directly due to lack of facilities, it is only fair to say that better accommodations would still leave open the problem of advantageous instruction for both classes. It is likely that this highly desirable two-hour plan can be kept in operation, even under favorable conditions, only at a largely increased expense as compared to the others.

It is probably unnecessary to attempt to indicate here just how the various kinds of work taught fulfil the educational requirements. It is believed that its well understood possibilities are realized. As for the practical, or utilitarian side, it may be said that the emphasis spoken of heretofore is largely given to it by following the lines laid

down by the pioneer schools, some of the later ones having departed therefrom. Much of the work of the older schools was organized by men who were in close touch with the world of shopwork. They were men of intelligence, of broad common sense, unhampered by educational dogmas. They appear to have felt that if boys were to come to the school with any favorable degree of interest in shopwork it would be because they were interested in actual conditions around them. By making the school shop and its work approximate as closely as practicable to those actual conditions, they obtained the strongest hold upon the boys, thus being enabled to do them the greatest good educationally and, at the same time, practically. Motives of economy and unnecessary distinctions should not be permitted to emasculate the beneficent policy thus inaugurated.

RESULTS.

It is yet too soon for us to look for marked results of the work in manual training, and in any event it is quite difficult to say with sincerity that such or such results are owing to this or that training in school. We can know that it had its influence upon the students, but how much less satisfactory their subsequent career might have been in the absence of that particular training it is impossible to say. So, manual training may have been the discoverer of natural abilities unrealized before, and thus have aided directly in fitting these young men for places in line with the great developmental forces of the present day. It may have prevented unwise choice of a life work, too often the chief cause of failure. If questioned, most of them would speak an enthusiastic and a willing word for manual training and its influence upon them.

Without dwelling upon this point, a few cases may be mentioned as being of interest. One, who graduated from the electrical-engineering course of a prominent university, is on the editorial staff of a leading engineering journal in charge of the electrical columns. His shop training was of much benefit to him during his college course; he was excused from a considerable portion of the time usually required for shop practice, which gave him correspondingly more time for other study. Also, the time spent in the shops was in great part upon more advanced work than that usually given the students; some of it had never before been given them. This advantage has been gained by another who is still an undergraduate. He reports that he has been able to obtain credit during his first year for the full four-year course of shopwork.

Another, a graduate from an academic course at college, is occupying a responsible position as a teacher, and has organized courses in manual training as part of his duties. The preparation for this work was obtained in the high school. Two others who took positions as teachers of manual training readily acquired the technical facility in the work which is so necessary a factor to success in this field.

Those still in college are studying in many lines, such as architecture, art, civil, mechanical, and electrical engineering, biology, chemistry, and medicine; others are taking general courses. Twelve institutions, all of high standing, are represented, including West Point and Annapolis.

It is the very sensible opinion of many that manual training does its most useful work in making opportunity for those students who are destined not to go to college. Of those who did not thus continue their studies, quite a number are in the business of patent soliciting, a few on their own account. A considerable number are working as architects, artists, lawyers, electricians, draftsmen, builders, engineers, and machinists. Of the latter, some who have entered private employ have been rated from six months to a year in advance of the regular apprentice. Nine, fresh from our shops, were admitted to the gun shops at the navy-yard, and in a peaceful way aided the progress of the war against Spain. In the same connection it may be noted that of the three or four who are in the Revenue-Marine Service, one was assistant engineer on board the *McCulloch* in the battle of Manila Bay.

It is believed that it will be observed, in the course of time, that an unusually large per cent of manual-training students are able to choose their careers instead of being obliged to take the first that offers. This alone, if it proves true, will justify the expense of introducing the work upon a broad scale, with its scope limited only by the capacity of students.

CIVIL GOVERNMENT AND POLITICAL ECONOMY.

The course in civil government and political economy is arranged to give about one-half year's work to each subject.

Prof. John Fiske's "Civil Government in the United States" is used as a basis for the development of the work in civil government, which proceeds upon the following lines:

The necessity and purpose of government in general.
The history of government among Anglo-Saxons, briefly.
The several units of local government in our country and their character and development, intensively and extensively.
The causes, character, and effectiveness of city governments.
The history of our colonial governments and their development into States.
The National Government.
- The United States Constitution:
  - Its antecedents.
    - Magna Charta.
    - Bill of rights.
    - Articles of Confederation.
  - Formation.
    - The history of the constitutional convention.
    - Work of the constitutional convention—the Constitution (studied).
  - Operation.

Throughout there is constant comparison of the form of government

studied with others, and an examination of the practical accomplishment of the particular form under consideration. The idea is to make the pupil feel that the intangible and mysterious things of government are a very real every-day matter to be known, appreciated, and dealt with in the most intelligent and effective manner.

The following works are useful in the collateral reading of the class:

On the units of local government, Howard's "Local Constitutional History of the United States" is especially helpful.

On the colonial and State governments, the well-known larger histories of the United States, particularly Justin Windsor's "Narrative and Critical History of the United States," the last edition of Bancroft's "History of the United States," "American Commonwealth Series," Dole's "Talks About Law," and Bouvier's "Law Dictionary."

On the national Constitution and its operation, Fiske's "Critical Period of the American History," Bancroft's "History of the United States," Curtis's "History of the United States Constitution," Bryce's "American Commonwealth," Macy's "Our Government," Wilson's "The State," and histories of our constitutional period to the present time.

Dr. Charles J. Bullock's "Introduction to the Study of Political Economy" was introduced into the school last year and proved a very acceptable help in outlining the work of the class. The subject was treated much after the lines laid down by the author, whose work seeks to arouse the pupil to the character of the study by showing what the nature and extent of our nation's wealth is, and how it has been and is developing. From the consideration of the special case it proceeds to the consideration of the general conditions and principles which govern the material welfare and progress of humanity, constantly using surrounding circumstances for illustration or verification of the truths taught. As far as possible, the class is led to investigate actual cases of industrial conditions. The preparation of the lessons is not confined to the text, but pupils are required to read collaterally such other works as Mill's Political Economy, Walker's Political Economy, McVane's Political Economy, Ely's Outlines of Economics, De Laveleye's Political Economy, and Lalor's Cyclopedia of Political Economy. Much help is also to be had from Hadley's Economics, Jevon's Theory of Economics, Ely's Taxation, Clarke's Philosophy of Wealth, and Walker's Wages Question.

The work in class is usually conducted in the way of a general discussion of the topics assigned, with the idea of presenting the matter from every possible standpoint and so giving to the pupils the broadest understanding of the problem under investigation.

A general summary of the work as treated in the class follows:

The economic history and conditions of the United States.
The causes of the production of wealth—consumption.
The production of wealth.
  Factors—their organization.
  Cost of production.

The theory of exchange.
- Basis of exchange—value.
- Medium of exchange—money.
- Monopolies—monopoly values.
- International values—international trade.

Distribution of wealth.
- Interest.
- Rent.
- Wages.
- Profits.

The wages contract and its results.
Socialism.
Theories of economic functions of government.

BIOLOGY IN THE HIGH SCHOOLS.

OBJECTS.

A properly balanced high-school course in biology is calculated to be of inestimable value either to the young man or woman whose means or inclinations admit of no further training than that obtained in the high school, or to the pupil who goes away to college with a view to specializing along some one line of scientific work.

The development of the habit of observing and of observing correctly lies, of course, at the very foundation of all scientific work. But the science course to be of its greatest disciplinary value must do more than train powers of observation. There must be developed the ability to distinguish among the many things observed the few which are essential—to know the difference between those which are real and those which are only apparent. There must be developed simultaneously the mental habit which demands the most careful and searching investigation into all phases of a question before there is any willingness to come to a conclusion.

While it is generally admitted that this educative or disciplinary quality of biology is its most valuable feature, the cultural value of the subject must not be lost sight of. Pure information upon biological subjects should form no inconsiderable portion of the course.

The third purpose of the high-school course in biology—to foster the love for nature—is only too frequently lost sight of by teachers. Instead of a course of study which will draw the pupil to the subject, interest him and make him anxious to go deeper into it, the work is so arranged and conducted as effectually to kill any desire to know more about either animals or plants. Every pupil when he comes to school has more or less of the love for nature in his heart; and this love should be developed, not with the idea of making of each pupil a naturalist, but to have him leave with a greater love for nature, a better understanding of her laws, and an appreciation of her benefits.

As to the best means for attaining these aims of a biological course there is almost a unanimity of opinion.

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As to the best means for attaining these aims of a biological course there is almost a unanimity of opinion.

To make of biology a disciplinary science, to make it develop the reasoning faculties and the æsthetic side of one's nature, as well as the memory and powers of observation, it must be studied in the laboratory and in the field, instead of in the class room. The student must be encouraged to find out for himself and, up to the limit of his ability, to do original work. He must be made to feel that he can learn by his own efforts, and that for successful investigation he must himself get to the bottom of a question.

EQUIPMENT.

For such work as that indicated in the preceding paragraph the three high schools of this city in which biology is taught (Central, Eastern, and Western) are well equipped. Each has a commodious and well-lighted laboratory, in one case specially planned for biological work; in the others sufficiently well adapted to meet all ordinary requirements. The plumbing, gas fitting, and other permanent fittings of the rooms have in every case been specially constructed for their intended uses. The movable furniture, tables, chairs, aquaria, etc., are of the regulation laboratory styles. The outfit of apparatus in each laboratory includes a number of compound microscopes, Bausch and Lomb, AAB. (Central 24, Eastern 16, Western 12), paraffin bath, microtomes, a full supply of glassware, the apparatus and reagents for performing the ordinary experiments in animal and plant physiology, and a laboratory reference library. Arrangements have been made whereby an abundant supply of live or preserved material for work is constantly on hand, and in each school there is a rapidly growing collection of typical forms of animals and plants for comparative work on any group. The collections of the local fauna and flora have assumed already considerable proportions, and contribute no little toward inciting and holding the interest of the pupils.

TIME.

The amount of time given to the study of biology is five school periods a week for two years (the third and fourth of the high school course). In the first year the work is in general biology, and the aim is to give the pupil a broad knowledge of the animal and vegetable kingdom and a firm foundation for the more advanced and specialized work which is to follow.

In the second year the pupil is allowed to choose between botany and zoology and to devote an entire year to his favorite science.

METHODS.

At least four of the five periods of each week are spent in the dissection and examination of living or preserved specimens in the laboratory under the immediate supervision of the teacher. Usually one hour a week is devoted to a lecture or to a recitation requiring home

preparation on the part of the pupil. An accurate record of all laboratory work, lectures, and other exercises is kept in specially designed notebooks which admit of the rearrangement of papers according to any plan of classification. Comparisons are constantly called for, and without going into the details of the subject a general knowledge of relationships and classifications is required. In the latter part of the first year and throughout the second year practice in the identification of species of both plants and animals is given as a part of the regular class work.

COURSE OF STUDY.

The following outline will show the approximate order in which the work is taken up and the amount of time given to each division of it:

First year.—Laboratory guide, Boyer's Elementary Biology.

First and fourth weeks, inclusive.—Study of the crustacea.

Type, the Crawfish (*Cambarus affinis*). Observations on the live animal, to determine the habits, food, methods of locomotion, etc.

Examination of the external structure, with a view to working out the segmented plan of the body and the homology of the appendages.

Examination of the internal organs. The relations of the systems of organs to one another; comparison of the crawfish and one of the higher animals, based upon the pupil's knowledge of human physiology. Comparison of a number of crustaceans (sow bug, crab, sand flea) with reference to the external character.

With this study comes instruction in the use of the compound microscope and in laboratory methods in general.

Fifth and eighth weeks, inclusive.—Study of the Insecta.

Type, the Locust (*Acridium americanum*). Examination of the external structures, comparing analogous parts of the crawfish.

Comparison of other insect types (beetle, butterfly, etc.).

And by the same methods.

Ninth week.—Study of the Protozoa.

Type, Amoeba or Paramecium.

Tenth week.—Study of the Porifera.

Type, the simple sponge (*Grantia* sp.).

Eleventh week.—Study of the Coelenterata.

Type, fresh-water Hydra.

Twelfth week.—Study of the Echinodermata.

Type, starfish.

Thirteenth week.—Study of the Vermes.

Type, the earth worm (*Lumbricus* sp.).

Fourteenth week.—Study of the Mollusca.

Type, the clam (*Venus mercenaria*).

Fifteenth to twentieth weeks, inclusive.—Study of the vertebrata.

The dissection of the fish and bird with a careful general comparison of skeletal characters of the fishes, amphibians, birds, and mammals.

Twenty-first week.—Study of the Protophyta.

Type, Protococcus or Pleurococcus.

Twenty-second to twenty-sixth weeks.—Study of algæ.

Types, Oscilaria, Sphyrogyra, Vaucheria, Nitella, Fucus.

In this and following studies practice in the identification of genera and species is introduced.

Twenty-seventh and twenty-eighth weeks.—Study of fungi.

Types, mold, lichen, toadstool.

Twenty-ninth and thirty-first weeks.—Study of the Bryophyta.
Type, marchantia.
Comparison of a moss plant (Hypnum).
Thirty-second to thirty-fifth weeks, inclusive.—Study of the Pteridophyta.
Type, a fern (Pteris or Pellea).
Comparison of a club moss, horsetail, etc.
Thirty-sixth and fortieth weeks, inclusive.—Study of the Spermatophyta.
Thirty-sixth and thirty-seventh weeks.—Study of the pine tree and other conifers.
Thirty-eighth and fortieth weeks.—Study of flowering plants.
Second year's work.—Zoology; text, Kingsley's Comparative Zoology.

The following outline is to be followed as closely as material and school facilities will permit. In some cases it will probably be found advantageous both for teacher and pupil to depart from the lines here laid down.

In planning the work the availability of live material has been kept in view, and the systematic sequence of the forms has been considered of secondary importance. Thus, the insects have been set first in the list, and with the related Arachnids and Myriapods will occupy six or eights weeks of the pupil's time. Then follow the Protozoans, Coelenterates, Echinoderms, etc., which must be studied from preserved material. With the advent of spring field excursions and collecting again become possible and the class will return to the study of forms which they can collect for themselves. Some additional types of worms, mollusks, and crustaceans, and elementary work in embryology will occupy the attention of the pupils. The higher vertebrata—birds and mammals—will be studied both in the field and in the laboratory.

1. CRICKET (one week).

Specimens to be collected by the pupils and identified as far as possible by the books in the reference library.

Compare carefully with the grasshopper, mantis, roach, and walking stick.

2. BUTTERFLY (one week).

Compare larva, pupa, and imago. Make careful drawings of each. Answer the following questions.

For the larva:
How is locomotion effected? Illustrate by diagram.
How does it feed? Make records and drawings.
How does it change into the pupa?
For the pupa:
How is it protected and against what?
What evidences of vitality are shown?
For the imago:
What external organs can be homologized with parts of the larva and pupa?
What organs of locomotion are found and how are they used?
Relative size of the pairs of legs; same of wings.
Compare moths and butterflies.

3. BEETLE (one week).

Study of alcoholic specimen. Make full drawings of all the parts, naming each carefully and giving the scale of enlargement. Study of live beetle. Weigh the insect carefully, record. Fold a small square of paper into a box and by means of a thread and wax, fasten wagon like to the beetle, pour shot into the box until the weight is just great enough to stop the beetle. Weigh the shot and compare with

the weight of the insect. How great a weight can a man pull along the smooth ground?

4. HOUSE FLY (one week).

Observations on living animal, as given by teacher. In this week review the whole subject of the Insecta.

Drawings:

(1) Imago, dorsal view, wings in place.

(2) Same, left side, showing spiracles, wings removed.

(3) Front view of head with antennæ.

(4) Egg of fly.

(5) Pupa, showing all the parts.

5. SPIDER (one week).

Keep a live spider in a small jar, feeding it upon flies, plant lice, etc. Record observations (made while doing the work outlined below) as to web spinning, taking of food, etc. Draw spider and web. From a large dead specimen draw—

Dorsal view of head, × 10, name parts shown.

Whole animal, ventral view, × 5.

Whole animal, side view, × 5.

Study related Acerata, Limulus, Buthus, and some Phalangid.

6. MYRIAPOD (one week).

Study of the living animal after directions given by the teacher.

Drawings—

(1) Dorsal view of the entire animal.

(2) Head, ventral view, showing all the parts.

(3) Head, dorsal view.

(4) Two consecutive segments, left lateral view, showing legs and spiracles.

In this week review the subject of the Arthropoda and prepare a classification defining the Crustacea, Acerata, and Insecta, and under the latter the subclasses as far as given in text-book.

7. PARAMECIUM (one week).

Protozoa in general. Draw several species of Foraminifera.

Observations on living Paramecium after directions given by teacher. Draw whole animal, showing all the characters.

8. SPONGES (one week).

Dissection of the fresh-water sponge (*Spongilla*). Laboratory directions in Boyer's Elementary Biology. Examination of spicules and the horny skeleton of other sponges. Review of Grantia.

Article in Scribner's Magazine, November, 1894, on "Sponge and spongers of the Florida Reef."

9. COELENTERATES (two weeks).

Study of Aurelia, Pennaria, Astrangia, and Metridum, comparing carefully with Hydra. Laboratory directions for Pennaria in Kingsley.

10. SEA-URCHIN (two weeks).

Comparing an Ophiuran, Holothurian, Asteroid, and Crinoid.

Review the starfish and dissect a sea-urchin, carefully comparing the two externally and internally; compare types of the other classes for external anatomy. Make a drawing of each.

11. WORMS (one week.)

Planarians and tapeworms. Examine, if possible, a liver fluke or other parasitic flat worm. Examine a planarian worm and compare as many types of worms as can be obtained.

12. SLUG AND SNAIL (two weeks).

Observations on living animals after directions given by the teacher.

Examine and draw the large garden slug (*Limax*).

(1) Dorsal view, showing all the parts.
(2) Right lateral view.
(3) Front view.
Study of allied forms, Helix, Physa, etc.
Compare and draw the chambered nautilus, Chiton and Scaphopod.
12. DAPHNIA, CYCLOPS, BRANCHIPUS (one week).
Observations on the living animal, after directions given by the teacher.
Study and draw (using the compound microscope) individuals of each group (*Cladocera*, *Copepoda*).
14. CRANGONYX OR GAMMARUS, ONISCUS (one week).
Observations on the living animal. Methods of locomotion.
Movements of appendages.
Care of young. Food.
Alcoholic specimens (substitute a large form).
Draw: Whole animal, × 2—side view. Chelipeds, × 10. Abdominal appendage, × 10.
Repeat work given above with Oniscus as a representative Isopod, and, in addition, draw—
(1) Dorsal view.
(2) Head, ventral view, showing mouth parts.
15. DEVELOPMENT OF FROG'S EGGS (two weeks).
Compare larval frogs and salamanders.
Compare adult frogs and salamanders.
Compare larval frogs and adult salamanders.
Draw—
A bit of spawn with a few eggs in place.
Single eggs in various stages.
Series of tadpoles, showing metamorphosis.
Keep careful records of the time of each stage.
16. SHARK AND SKATE (two weeks).
Compare with fish.
Study carefully the fin structure and the skeleton.
Draw—
(1) Shark and skate, dorsal and ventral view.
(2) Shark, left lateral view.
(3) Pectoral, ventral and caudal fins.
(4) Shoulder girdle of shark.
(5) Shoulder girdle of perch.
17. SNAKE, TURTLE, LIZARD, ALLIGATOR (two weeks).
Compare carefully for external characters. Make for each of the types the following drawings:
(1) Entire animal dorsal view.
(2) Dorsal view of head.
(3) Left side of head, mouth open, tongue exposed.
(4) Fore and hind foot of left side.
18. BIRDS (five or six weeks).
By the use of the skins in the high-school collection learn to recognize the more important orders of birds. Identify at least 25 species of common native birds, keeping a careful record of the characteristic marks of each.
19. MAMMALS (eight weeks).
Dissection of some small mammal.
Careful study of the skeleton of man and comparison with that of the type dissected.
Draw—The more important bones of the human skeleton. The same bones of some other mammal.

Second year botany.—Text-books and laboratory guides, Bergen's Elementary Botany, and MacDougal's Plant Physiology.

First week, five days.—Seeds and spores, independent and class work; Bergen, chapter 15; Study of mechanisms, etc., for dispersal of seeds and spores of all available plants.

Second week, five days.—Same. Also determine available plants, having in view the variations occurring under the preceding topic.

(During the remainder of the year at least one hour laboratory work each week should be devoted to the classification of material from all types, as available.)

Third week, five days.—The seed and its germination, Bergen, Chapter I; also Chapter III.

Fourth week, five days.—The parts of the seedling; its development; Bergen, Chapter II; also Chapter III.

Fifth week, five days.—Roots, Bergen, Chapter IV.

Sixth week, five days.—Same, absorption of liquid nutriment, MacDougal, Chapter I.

Seventh week, five days.—Absorption of liquid nutriment, MacDougal, Chapter I.

Eighth week, five days.—Stems, Bergen, Chapter V.

Ninth week, five days.—Structure of stems, Bergen, Chapter VI.

Tenth week, three days.—Structure of stems, Bergen, Chapter VI; Living parts of stems, Bergen, Chapter VII.

Eleventh week, four days.—Living parts of stems; work of stems, Bergen, Chapter VII.

Twelfth week, five days.—Movements of water in plants, MacDougal, Chapter II.

Thirteenth week, five days.—The same.

Fourteenth week, four days.—Buds, Bergen, Chapter VIII; Leaves, Bergen, Chapter XI; minute structure of leaves, Bergen, Chapter XII.

Fifteenth week, five days.—Leaf arrangement for exposure; Movements of leaves and shoots, Bergen, Chapter X.

Sixteenth week, five days.—Leaves of peculiar form and use, Bergen, Chapter XI; Minute structure of leaves, Bergen, Chapter XII.

Seventeenth week, five days.—Minute structure of leaves, Bergen, Chapter XII.

Eighteenth week, five days.—Functions of leaves, Bergen, Chapter XII; Protoplasm, Bergen, Chapter XIII.

Nineteenth week, five days.—Absorption of gases, MacDougal, Chapter III.

Twentieth week, five days.—Same; Respiration, MacDougal, Chapter IV

Twenty-first week, four days.—Respiration, MacDougal, Chapter IV.

Twenty-second week, five days.—Irritability, MacDougal, Chapter V.

Twenty-third week, five days.—Same.

Twenty-fourth week, five days.—Infloresence, Bergen, Chapter XIV; Independent work; Field work.

Twenty-fifth week, five days.—Same.

Twenty-sixth week, five days.—Morphology of typical flowers, Bergen, Chapter XVII; Independent work.

Twenty-seventh week, five days.—Fertilization, Bergen, Chapter XVIII; Field work.

Twenty-eighth week, four days.—Same.

Twenty-ninth week, four days.—Same.

Thirtieth week, four days.—Struggle for existence, Bergen, Chapter XXI.

Thirty-first week, five days.—Growth, McDougal, Chapter VI.

Thirty-second week, five days.—Same.

Thirty-third week, five days.—Review of types, independent work, anatomical, developmental, and systematic work.

Thirty-fourth week, five days.—Same.

Thirty-fifth week, five days.—Same.

Thirty-sixth week, four days.—Individual work on available material.

Thirty-seventh, thirty-eighth, and thirty-ninth weeks.—Same.

ENGLISH.

The high school of Washington is compelled to meet the difficulty which all schools face, the habitually loose, careless expression of the great body of pupils. It is useless to deny that this condition exists, because in the street, in the home, too often even among those whose business is education, the thought is loose and obscure. The attempt of the high school is to overcome this tendency, to arouse in the pupil a desire to use not "fine English," but correct, adequate expression commensurate in dignity with worthy thought. That this ideal has not yet been attained goes without saying, but it is encouraging to be able to report progress made.

It is believed that the teaching of English has two great objects: the clear, correct expression of thought, which demands clear, correct thinking, and the appreciation of the best in literature, which is the best in thought. These two are never separated in the course, because of the belief that the second furnishes most delightful material for the first, with the certainty that the first of these is the fundamental necessity of all education, that the attainment of it is the test of all successful teaching in all departments of study, that the English teacher in giving to the pupil an appreciation of the fundamental but simple laws governing thought gives him the chief tool for the successful accomplishment of his work in all lines of study. The English course has been planned with this, not as a sentiment, but as a principle, constantly in mind.

Four hours a week during three and a half years are given to English, but by careful correlation of history, by the thoughtful cooperation of teachers of science and the languages, the opportunity for practice in the application of the principles is greatly enlarged, the general utility of the study demonstrated, and a corresponding increase of interest aroused in the pupil.

If the pupil is to express himself clearly and correctly he must understand the simple units of discourse, the sentence and paragraph; accordingly, the work of the first quarter is devoted to the study of these two. No attempt is made to analyze the sentence for the sake of analysis, but, from the text chosen, sentences are studied with reference to the relation between the thought and the form, until the pupil knows that thought controls form, until he knows that the mere use of the coordinate conjunction between two thoughts can not make a compound sentence, that he can not change a correct compound sentence into a correct complex sentence without changing the idea expressed. In the study of the sentence from this point of view the entire subject of relation words is dealt with. The pupil is taught that certain relation words mean certain things, hence must be used intelligently. He is required to put this knowledge to use in oral and written work which is criticised entirely from the correspondence of form with thought.

The pupil who says, "Zebek Dorchi was a bold intriguer, and he led the Tartar tribe to revolt," is not permitted to go in peace. He may call this a compound sentence. No one interferes with that at first, but he is sent back to his thought, left there until he sees that these are not independent thoughts of equal value, therefore can not be expressed correctly in compound form.

By analysis of carefully selected paragraphs from the text, the principles governing paragraph structure are established. It is here that the most valuable work is done. The pupil learns that conveying thought to another is a matter capable of being governed by positive principles, as simple as good common sense. About what is he to talk? What is he to say about it? How much is he to say about it? How should these points be arranged? It is necessary to know these things if he is to tell the story of trip up the river, or describe the Washington Monument. It is necessary to know nothing more if he is to discuss the Peloponesian war, the force pump, or the manufacture of ice; necessary to know no more if he were to write a history of the nineteenth century. In the simplest manner in the world he takes the names of these laws: Unity, selection, proportion, method. Their conscious application to every recitation the student makes, on no matter what subject should be required, for only by conscious practice can he acquire the habit, and only when the habit is fixed is he studying any subject intelligently. When he knows that every well-constructed paragraph is the development of a single topic, that every sentence which does not relate to that topic is useless, he readily grasps the different forms of paragraph. There is no mystery here. A 14-year-old child has no difficulty in seeing that the paragraph which tells a story differs in certain particulars from that which describes the Washington Monument, or proves that football is beneficial. It was the custom of former years to defer the study of these forms of composition till later in the year, but the need for them, in both history and English at the outset, made it wise to take them in their simplest form, the paragraph, during the first quarter of the first year.

On the side of expression there is absolutely nothing but the amplification of these principles by application to increasingly wider fields of study during the four years. The details of the plan are changed from year to year as experience shows the inadequacy of certain efforts, but the belief in the great fundamental principle that correctness of expression comes from intelligent application of certain laws of thought changes never.

During the first year more formal study is given to narration, description, and simple exposition. In the second year argumentation is studied in its simpler phases. During the remaining years all forms are used, as the nature of the subject demands, and during the entire course there is constant, careful criticism of oral as well as written work, entirely from the standpoint of adequacy in expression of correct

thought, with greater and greater insistence that the thought shall keep pace in value with the increasing maturity of the mind.

The feeling has often been expressed that there must be great formalism, a great coldness, in the work—a loss of sympathy with the literary side—since it is insisted so urgently that a pupil shall have some reason for the faith that is in him when he voices his faith, and that his form shall plainly show this in all recitations, whether discussion of character or narration of the most touching story. In the hands of a machine teacher there is danger. In her hands the inspirational method is dangerous beyond words. The best proof that formalism does not prevail is the daily recitation. No child can tell the story of Little Nell acceptably who has not been led to feel the tenderness and pathos with which Dickens has created her. The descriptions of Elaine and Guinevere, Lancelot and Galahad—the pictures of the dim, rich city and the flaming brand—bear witness to the appreciation of the magic beauty of Tennyson's art, and the annual desire to play Merchant of Venice and give Dickens's tableaux shows that there is a very lively interest in the subject-matter, while some of the paragraph work of the fourth-year classes in subjects of general interest—football, the track meet, the accident on the street, or in the market—show that the constant practice of knowing what is to be said and how to say it has not been waste of time and suffocation of genius. In fact, "English" is very much alive, both in expression and interpretation, and pupils realize that as a study it is not a mere device for the torture of young minds.

Two years ago, instead of adhering to the old plan of sending each quarter to the teachers of the different years the work to be done in that year for that quarter, it was deemed wise to place in the hands of all English teachers a complete outline of the course for four years, in order that each teacher might have before her the entire scope of the work, its purpose, and the details of execution of that purpose, that each might know exactly what she was expected to accomplish in carrying out the general scheme and how much each year should give to the succeeding one. This printed plan contains not only the outline, but suggestive details, which are amplified in department meetings and in conference with the individual teacher.

The results are greater uniformity in the work of the four schools, ampler material for comparison of results, and the greater enthusiasm that comes from discussion of principles by a body of earnest workers.

The pupils, while far from approaching the standard set for them, show encouraging improvement in their power to think and talk intelligently and in ability to write in a sensible, interesting manner on any subject reasonably within their appreciation. In the years to come it is hoped that improvement in these lines will continue and that the daily use of English that is not only correct, but in some degree really good, may be found.

Appended is the course, with omission of details.

ENGLISH IN WASHINGTON HIGH SCHOOLS.

Purpose:

(*a*) Clearness of thought.

(*b*) Clearness and correctness of expressio .

(*c*) Familiarity with the work of the great masters of thought and expression.

(*d*) Development of intelligent appreciation of good books.

(*e*) Sufficient knowledge of the history of literature to make a proper setting for the works studied.

FIRST YEAR—FOUR HOURS A WEEK.

First quarter.

Purpose: Study of the sentence and paragraph as the means of expression.

Text: De Quincey's Revolt of a Tartar Tribe.

(*a*) Study the structure of the sentence—simple, complex, and compound—with special reference to the value of each in clearness of expression of thought. Note the position, arrangement, and connection of elements for the same purpose. Make complete study of connectives; those that connect elements; those that show relation between sentences. Compare loose and periodic sentences, long and short, with reference to clearness and force. Study choice of words. Impress the truth that the laws of selection and method apply first of all to the sentence. Require constant practice in sentence making.

(*b*) Study paragraph structure. Analyze for position and development of topic sentence; study with care the relation of sentences with one another, with topic sentence; study the kinds of paragraph, narrative, descriptive, expository, argumentative, making careful study of the relation words belonging to each type of paragraph; with this give daily practice in paragraph making, both oral and written; criticise for selection and arrangement and for sentence structure.

Second quarter.

Composition, simple narration and description, with stress on narration.

Work studied: Dickens's Tale of Two Cities.

Contemporaries: Thackeray, Trollope, George Eliot, Charles Reade, Wilkie Collins.

Assign the book as a whole to be read before any work based on it is taken up. During the two weeks required for this reading, plan the eight recitations so that no preparation outside of class is required.

With a good short story, take up the points made on pages 70–75 of the Paragraph and Theme Pamphlet.

Enforce the law of selection, making sure that pupils really see that only vital topics are selected. Give them Hopkinson Smith's law that the good short story should be reducible to a dinner-table anecdote of three minutes. Outline the story read and apply the three-minute test. Give a second story and require outline from pupils without previous comment by teacher or class. Criticise for selection and arrangement. Require outline for original narration from pupil's experience. Require short original narration—criticise for outline and sentence structure. After this assign selection of the different stories from "Tale of Two Cities." Work with the class on outline of the bare story of "Lucie and Darnay." Require the work to be unaided on the stories of Dr. Manette, Madame de Farge, Sidney Carton, and any others desired. Impress the idea of purpose as governing selection and arrangement.

From these outlines require both oral and written narration, criticising carefully the sentence structure. Guard against commonplace embellishment and sentimentality.

Third quarter.

Composition: Narration, description, comparison and contrast, emphasis on description.

Assign the poems in the order of development of the Arthur story: Coming of Arthur, Elaine, Holy Grail, Guinevere, Passing of Arthur. These are to be read simply for the general points of the Arthur story, except Elaine, which, after the first reading, is to be studied in detail.

Fourth quarter.

Composition, narration, description—exposition.

Texts: Ancient Mariner, Selected Poems of Wordsworth, Eve of St. Agnes, Selected Poems of Shelley, "Prisoner of Chillon."

Brief sketches of Wordsworth, Coleridge, Keats, Shelley, Byron, Scott, and Macaulay.

Very little written work should be based on the poems of the quarter. Study them solely with reference to the thought and the beauty and truth of the expression, requiring constant memorizing of beautiful passages. "There can be no more useful help for discovering what poetry belongs to the class of the truly excellent, and can, therefore, do us most good, than to have always in one's mind lines and expressions of the great masters."

The special emphasis in composition is to be placed on exposition.

Through the entire year clearness of though and correctness of expression are the first considerations. The eternal question must be, "What do I actually think about this?" "Does my language express just that thought?" In making any outline the question is, "What is my purpose?" That once settled, selection, arrangement, and proportion are good or bad with reference to the development of that purpose. The teaching in this matter of purpose, selection, proportion, and arrangement should be so logically done that pupils may be able to take any unit within their comprehension, break it into principal and subordinate divisions, and discuss it intelligently. The development of this power in the student is never to be lost sight of from beginning to end of the course. In composition the oral work is as important as the written. Every recitation is a paragraph isolated or related, and should be criticised accordingly. In addition to written work prepared at home, much should be required in class. In all work unity of thought, correct spelling, punctuation, and capitalization are the tests.

SECOND YEAR—TWO QUARTERS—FOUR HOURS A WEEK.

Composition, argumentation.

Texts: "Merchant of Venice," "As You Like It," "Twelfth Night," "Burke's Conciliation."

Assign first reading of play for: (1) general story; (2) structure; (a) structural point of each act; (b) development of structural point by scenes; (c) the stories of the play—major, Casket and Bond; minor, Jessica and Ring, use and development of each; complication, climax, disentanglement.

Assign second reading for study of characters and actions, all points made with reference to these, to be proved by text. In this study all forms of evidence are used, and care must be taken that the pupil is sure of the meaning of the point made and the applicability of the evidence to the point. In studying text for character and actions require the memorizing of finest passages cited as evidence.

Study the play for its beauty of words, figures, music, its power of arousing thought.

The general method for the collateral plays is the same as for this, but with less time devoted to details of each. Select special points for emphasis in the study of each and adhere to the plan.

Analyze Burke's speech on Conciliation for kinds of proof.

(1) Read speech for main outline. (2) Analyze main divisions for the principal propositions. (3) analyze arguments used to sustain main propositions. Discuss the kinds of argument with such care that the students are clear as to their use and comparative value. Require application of these arguments to original work as soon as discovered. Constant written work is here the best test. (4) Reduce entire speech to most condensed form by use of results of (1), (2), and (3). The work of (2) and (3) demand careful study of paragraph structure. (5) Study selected portions, as the ana of American love of freedom, of Wales and Chester, for force and clearness, noticing how admirable is his use of words, figures (climax and antithesis), and sentences. Study selected passages as illustrative of Burke's fine sarcasm. (6) Give frequent practice in application of arguments to original propositions on questions of immediate interest to pupils.

The need of a carefully prepared outline for every argument can not be overestimated. Require briefs of arguments upon topics not developed into essays.

THIRD YEAR—FOUR QUARTERS—FOUR HOURS A WEEK.

Composition: Weekly themes based on study of literature; narration, description, comparison, argument, exposition.

Texts: First quarter, Chaucer's Prologue; second quarter, Hamlet; third quarter, Macbeth; fourth quarter, Milton's Minor Poems; Books I and II of Paradise Lost.

History of literature from the Beowulf to Dryden, Stoppford Brooke.

In the third year the work broadens in scope. The student is familiar with the different forms of composition. He has studied the laws of rhetoric as applied to these, has learned how to approach the work of an author, and is familiar with the use of the library. He should study now the development of the literature and language. He should be able to criticise more intelligently the works read, to discuss the criticisms of others with an appreciation of the point of view from which the criticism is made, and, perhaps, to produce work which shall be something more than indifferent thought in correct language.

The written work must be weekly, with careful criticism of unity, selection, and arrangement. The daily oral work requires the same careful attention.

First quarter.

Three weeks devoted to review of kinds of composition with daily written work.

In Chaucer, read at first for the poetical quality, the meter, and the music. Assign at first but few lines, taking up carefully the new points in inflection and pronunciation, requiring the law for every form. The introduction gives all the help needed for an understanding of grammar and meter.

One of the most valuable exercises in expression, both in choice of words and structure of sentence, is translation. For this Chaucer offers abundant material. This is the one opportunity of the English teachers to work in translation with all pupils. In its helpfulness to the teachers of language as well as to pupils it can not be overestimated. Permit no pupil to translate by simply putting the modern English equivalent in place of the old English word. Require the exact shade of thought, but in modern construction. Cultivate a habit of really good sentence structure. Require the observance of the laws of selection and arrangement, even where it changes the order of the poem. The translation is prose, and should observe the laws governing prose.

Require the pupil to analyze the poem for himself, discovering the man and the times in the work without constant questioning.

Analyze the elements in the language, then assign the history of the development of English. This development is to be noted through the work of the entire year.

The history of literature should cover the ground from the Beowulf to Chaucer. Select only the most important points for assignment and plan the lessons so that this may fall into its proper subordination.

Second quarter.

Detailed study of Hamlet; collateral reading of Romeo and Juliet.

First reading of play for: (1) general story; (2) structure. See outline of second year for suggestions on 1 and 2.

Take next the study of character, which requires many readings of play. Study characters as wholes, not in single scenes or acts, but trace growth through each scene and act. Study effect of character on action and action on character, the influence of character interplay. Require constant proof from text that there may be no vaporing criticism on the model of Mrs. Jameson. Stevenson says, "Man is a creature who does not live upon bread alone, but chiefly by catchwords," and nowhere is greater care needed to guard against catchwords than in a recitation on character.

Require pupils to memorize speeches which show the thought of the characters at crises in the play.

Study text for beauty of word and phrase, for figures, music and rhythm, requiring the memorizing of many passages.

Study words only as far as necessary to a clear understanding of the meaning.

Discuss all points in character and meaning of play, first from the pupil's own interpretation of text. Then take up the criticisms of Dowden, Schlegel, Ulrici, etc., with the closeness of analysis of an argument, comparing them point by point with each other and with the analysis made by the pupils, using text constantly as proof. Even the professional critic finds it temptingly easy to string together adjectives or to make careless assertions from insufficient evidence.

Third quarter.

Detailed study of Macbeth; collateral reading, Julius Cæsar, Othello, and King Lear.

In the third quarter the work is less detailed. Plan from the beginning to read each play for certain definite points, that the work may not be hurried and lacking in unity at the close of the quarter.

Be sure that every recitation a pupil makes, every paragraph he writes, shows clear thinking. Sentences correct in structure may mean nothing.

The history of literature in the second and third quarters covers the period from Chaucer to the seventeenth century, special attention being given to the rise of the drama and the work of the dramatists.

Fourth quarter.

The special work of this quarter is the study of Milton's Minor Poems, with collateral reading of Books I and II of Paradise Lost. The history of literature covers the seventeenth century, but has for its chief interest the poets of the latter part of the sixteenth and those of the seventeenth century.

FOURTH YEAR—FOUR QUARTERS—FOUR HOURS A WEEK.

Composition; themes based on (a) literary study of the year, for development of critical power; (b) experience of the pupil, for development of creative power.

Texts: Essays and prose fiction.

History of literature; review from the Beowulf to eighteenth century; advance from eighteenth century to present.

The work of the fourth year deals with prose. As the prose of the nineteenth century is largely of two classes, the essay and the novel, the development of these two forms has been chosen as the unit of study.

The essays for class study are Bacon's Essays, ten lessons; Addison's Sir Roger de Coverley papers, ten lessons; Lamb's Essays of Elia, eight lessons; Carlyle's Burns, twelve lessons; De Quincey's Flight of a Tartar Tribe, twelve lessons.

To leave the essay with the study of these authors is to omit a feature essentially

modern and valuable. The teacher should, therefore, read in class and discuss with pupils selections from Stevenson, James, and Lang for that peculiar charm of phrase which is lacking in the earlier essayists.

The texts in fiction are selections from Malory's Morte d'Arthur, More's Utopia, Sidney's Arcadia, Lyly's Euphues, Bunyan's Pilgrim's Progress, Defoe's Robinson Crusoe, Richardson's Sir Charles Grandison, entire texts of Goldsmith's Vicar of Wakefield, and George Eliot's Silas Marner. In addition to this each pupil must report on one of the novels of Miss Edgeworth, Miss Austen, Scott, Thackeray, and Howells or James. There is always in class a minority that has read the younger moderns, and is delighted to report on them.

FRENCH.

The growing popularity of modern languages is due, without doubt, to the increasing demand for their use in business, travel, and social life, and to a prevalent belief that beyond the commercial value of a practical knowledge of a living tongue there is good discipline in the study of its idiom and culture in its literature. In the old days it was considered sufficient to be able to read foreign writers in their own vernacular. Such ability was developed by a study not unlike that given to Latin, except in its seriousness and extent. To-day the effort is to teach the language as a spoken tongue, to give students idiomatic, conversational facility, and to increase the earnestness with which the drill work and literary study were formerly carried out.

In the beginners' class in French Fontaine's Livre de Lecture et de Conversation is being used. This work is based on the principle that a thorough knowledge of the grammar and a practical use of the language can both be acquired at the same time. Each lesson contains reading, conversation, and grammar, i. e., is at once practical and theoretical. The lessons are progressive, and frequent "recapitulations" give exhaustive questions in review on all grammatical points, while special emphasis is laid upon the study of verbs, the most difficult point in studying French.

From the first, so far as practical, French is the language of the class room, and thus great interest is aroused among the students. Translation, however, is not entirely banished from the class room. An easy text, edited with notes and vocabulary, is taken up during the second half of the first year.

In the second year Lectures Courantes, a continuation of the Livre de Lecture et de Conversation, is studied. This book contains oral lessons and also written exercises, the English text of which is based on the French text previously read; Les Historiens français du XIXe and Fontaine's edition of Dumas's La Tulipe noire are the other texts in use.

In the third year Les Prosateurs français du XIXe Siècle, Molière's Le Bourgeois Gentilhomme and L'Avare are read, as well as two or three modern plays. French has now become exclusively the language of the class room, but, in order to familiarize students with French

idioms and their corresponding English phrases, the second half of Grandgent's French Composition is used as a text, all corrections of mistakes and explanations being given in French.

In the fourth year Les Poètes français du XIXe Siècle, Molière's Le Misanthrope, Corneille's Le Cid, and some of the more difficult works of the seventeenth century are read, while original compositions are also included in the programme.

GERMAN.

German is studied in the scientific sections for four years, and is optional in the academic sections of the third and fourth years.

The purpose of the study is twofold: (1) Practical knowledge; as the high schools are in no sense merely institutions preparatory for college, it is essential that students should acquire such a practical knowledge of the German language as will be useful to them in everyday life. To this end a pure pronunciation and facility in speaking, reading, and writing the foreign tongue are thoroughly taught, in the broadest sense. (2) Theoretical knowledge; besides a practical knowledge, an intelligent appreciation of good German books is developed in the student. To read and to appreciate the German classics and to acquire sufficient knowledge of the history of German literature to furnish the proper s tting to the works studied are important features which receive careful attention.

In the first-year class (five hours per week) recitations are at once conducted in German, the student being required to answer in that language questions asked by the instructor. These conversational exercises, however, are carefully graded, omitting all words and phrases not previously given in the text. Every word that is introduced in class is actually taught, and must be committed to memory. Grammar is the foundation upon which these exercises are taught. One fact at a time is developed by all the illustrations at command, so that it is impressed upon the students' minds. It is endeavored to present each idea or rule in such a manner that it dawns upon the perception without explanation in English being necessary. For home review rules in English are provided. By the end of the year a thorough knowledge of the rudiments of the German grammar have thus been acquired, viz, declension of articles, nouns, adjectives, pronouns, active and passive voice of weak and strong verbs, comparison of adjectives, numerals, uses of the more common prepositions and conjunctions, German word order, principal uses of the subjunctive.

Reading texts are introduced almost from the beginning, their principal object being to increase the pupil's vocabulary. About two hundred pages of easy German prose are read in the course of the year. The vocabulary of the reading matter is memorized, i. e., the nouns with

their definite article and plural endings, and the verbs in their principal parts. Each word thus acquired receives careful drill, so that it can be applied in all its various relation .

Although German is the language of the class room, English is resorted to whenever necessary to a complete and efficient understanding of the subject. Translations from and into English are frequently made. Brief written exercises are prepared for every recitation, consisting mainly of translations into German. Original composition is encouraged from the beginning.

Second year, four hours per week.—Two hours each week are given to the reading of ordinary German prose, the lessons being prepared at home, while in class these works are carefully translated into English and discussed in German. All grammatical difficulties and idioms contained in the text are thoroughly explained and drilled. Close attention is paid to fluency in reading and to correct and natural intonation of the voice; to this end a short German play is read with assigned parts.

After a careful review of the rudiments of German accidence, as studied in the first year, systematic grammar lessons are introduced, which are illustrated by a thorough drill upon the text read. Special stress is laid upon word formation, the use of the articles, prepositions, and conjunctions, the elements of syntax, especially the use of the modal auxiliaries, the subjunctive and the infinitive modes. Easy connected English is translated into German, and original composition is undertaken once or twice each month. The student is required to write a descriptive or narrative paragraph upon a given subject which is within the range of his vocabulary.

Third year, four hours per week.—Two hours each week are devoted to the reading of classical and contemporary prose and verse selected from such authors as Goethe, Schiller, Heine, Freytag, etc. Translations into English are made whenever the difficulties of the text demand it. Some easy short stories are read at sight, and the student is xpected to relate their contents. Prose literature alternates with more extensive works of German poetic literature, selected poems being memorized.

The translation of connected English, such as letters, biographical and historical extracts, is continued in this year and is supplemented by original composition of the same nature. Systematic grammar lessons occur once a week, illustrated by a thorough drill upon the text read in class. The subjects treated include the study of idioms—especially the idiomatic use of prepositions—synonyms, and syntax.

Fourth year, four hours per week.—This year's course comprises mainly the study of German classics. Three are selected from such works as the following: Lessing's Minna von Barnhelm; Schiller's Maria Stuart, Die Jungfrau von Orleans, Wilhelm Tell; Goethe's Herman und Doro-

thea, Egmont, Iphigenie. These works are thoroughly discussed from the literary and dramatic point of view, and the students are required to write monthly essays relating to them. An outline of German literature, with short extracts from German literary productions, supplements this line of studies.

Higher German grammar is studied in conjunction with the texts read in class. Translations of short selections from the best English and American authors and brief original compositions on subjects relating to everyday life are prepared once a week.

Academic sections.—Five hours a week are given to the study of German in the academic sections during the first year, four hours a week during the second year.

In these classes, as Latin grammar has already been studied, the work of three years is covered in two, the study of German grammar being reduced, while the time allotted to reading is increased.

GREEK.

The course in Greek is designed to prepare pupils for the best colleges. It is hoped that those who complete the course will show ability to read at sight Greek prose of average difficulty and to turn passages of connected English into Greek, the two points chiefly emphasized in the college entrance examinations of the present day. Proficiency in these points implies (1) a considerable vocabulary, (2) mastery of the forms, (3) a working knowledge of the rules of syntax. These ends are kept in view throughout the course.

In the first year of study (second-year pupils) White's First Greek Book is finished at the end of the third quarter. During the fourth quarter about fifteen or twenty pages of the Anabasis are read. This is treated in such a way as to furnish a very thorough review of the forms required in the preceding work and to encourage the pupil to be satisfied with nothing less than the complete mastery of each sentence. This quarter is regarded as the most important portion of the three years' work, because the methods of study adopted at this time and the standard of scholarship set up determine the character of all work to be done thereafter in the high school and in the college.

In the second year of the work (third-year pupils) four books of the Anabasis are completed and reviewed. Especial attention is given to mastering the rules of syntax, so far as involved in the Anabasis. The forms also require constant review. About forty lessons are completed in Collar and Daniell's Greek Prose Composition. Daily practice in sight reading is given.

In the last year's work (fourth-year pupils) three books of the Iliad are completed. There is some review of the Anabasis, and usually another book of the Iliad is read or selections from some prose author. The forms and syntax of the grammar are also thoroughly reviewed

and Collar and Daniell's Greek Prose Composition is completed; one hundred lessons.

The text-books used are White's First Greek Book, Goodwin's and White's Anabasis, Goodwin's Greek Grammar, revised, Seymour's or Keep's Iliad, and Collar and Daniell's Greek Prose Composition.

HISTORY.

History is taught primarily to train the pupil, secondarily to put him in possession of the great body of standard or "orthodox" historical facts.

The particular training aimed at is the cultivation of judgment. That pupils, that men and women even, need such training admits of little argument. In the discussion of any subject the mind must answer the questions: What is to the point? What is vitally to the point? In what order must these essential facts be presented? To the extent that men think to the point and talk clearly and forcibly to that extent are they educated. Failure in these respects marks the untrained, illogical mind.

History is to be studied, too, for its own sake. The past of man's living in society, his conscious effort to better his condition, the story of the labored efforts by which he has overcome difficulties, can never fail to be of interest to other men struggling with the same problems. Nor is the past without lessons for the present. This story at least in its outlines, the points in it which serve as milestones to mark the progress of this struggle, the so-called standard facts of history, the cultured man or woman must have. "Sighing for other worlds to conquer," "crossing the Rubicon," "meeting one's Waterloo," must mean more than mere phrases to our boys and girls.

An account of the aims of history teaching would be incomplete without mentioning the possibility, in the hands of the resourceful teacher, of making better citizens, better men. Instances abound of deplorable effects following the acts of individuals or States in violation of economic, moral, or other law. Without preaching or needlessly intruding the opinion of the teacher, these may be made lessons for the guidance of the present. As pupils see that institutions are developed to meet certain ends, outlive their usefulness and are superseded by others better fitted to meet the changed conditions; as they realize that men must be judged, if judged fairly, by the opportunity which their time affords them; as they see that truth is many sided, we shall develop generous, broad-minded sympathy, without which the training and culture sought must be largely profitless.

It has been said that history is logic written in concrete facts. The problem of the student of history is to arrange these facts, this raw material, according to the laws of thought. If the story of Alexander is asked for the product must be a narrative, conforming to all the laws

of narration. If it is the government of Plymouth or a debate on the justice of the execution of Charles I, conformity to the laws of exposition or argumentation is the end sought.

To reach this end the skeleton of thought, the outline, should precede the finished product. In many cases the work may as well stop there, for when the outline has been logically made the most important step, the marshaling of essentials, has been taken. The development, the recitation, with its opportunity for teaching relevancy, sticking to the point, expression, etc., is the next step. Pupils are made to see that there are many things which may be said on any subject, that their work is to pick and arrange logically the few best thoughts which will present the subject as a unit.

Home work is frequently made more effective by developing to some extent in the class the topic to be discussed at the next lesson, or a similar thought which may serve as a type. Excellent drill is found in tracing, with either open or closed text-books, topics which run throughout the period under discussion or throughout the year.

The selection of the particular thoughts to be discussed in the class is at first largely a matter of teacher opinion. Still the cultivation of the pupil's judgment is the end sought. By referring him to standard historical writers his view of the study will be broadened. He will see what there is in the field of history. The study of the institutions of one's country will suggest ideas to be looked for in the study of others. After work of this sort it will be found profitable to ask pupils to read through an extended period to decide what is worth considering in detail, what shall be studied in the class. In this way class-room work is largely planned in accordance with pupil judgment.

In all work it is borne in mind that the class room furnishes the opportunity for teaching, the chance to help the weakness, to direct the strength of pupils. It misses its purpose if it serves simply as the place where pupils may exhibit their strength or weakness.

The secondary purpose of history teaching is achieved more or less incidentally. Facts will stand out more prominently if in the class only those movements and events are discussed which in the teacher's large judgment are the most important.

The following table will show the courses of history offered in the school. The aim in all years is the same, with increasing stress laid on the secondary purpose in the more advanced classes. The methods, while essentially the same, vary with the increasing power of the pupil. In the upper classes the selected units are larger. The paragraph is made the unit for the first quarter of the first year, a theme, as for example the history of political parties in the United States, may well be demanded in the last quarter of the fourth year. So, too, in getting together the facts, the raw material for classification, greater demand is made on the pupils of the upper classes for outside reading. In the fulfillment of this idea the last five weeks of the third year are given

up to an intensive library study of the French Revolution, while the whole of the course in American history follows this plan:

Year.	Nation.	Text.	Time.	Remarks.
First	Eastern nations	Myers's Eastern Nations and Greece.	One-fourth year	Required of all pupils.
	Greece	do	do	Do.
	Rome	Allen's Short History of the Roman People.	One-half year	Do.
Second	England	Montgomery's Leading Facts of English History.	do	Do.
Third	Europe, since fall of Rome.	Duruy's History of France	One year	Elective.
Fourth	United States	Library method	do	Do.

LATIN.

The general Latin course covers four years, with five recitations a week in the first and fourth years and four in the second and third years. The aim of the first year's work is to ground pupils thoroughly in forms and to make them familiar with the commonest principles of syntax. In order to give some practice in connected reading before beginning Cæsar, Collar and Daniell's First Latin Book is supplemented by Sanford and Churchill's Viri Romæ.

Whether on account of the long vacation or defects in the first year's training, the average pupil is found unable to read a text as difficult as Cæsar at the beginning of the second year. The study of Viri Romæ is for this reason continued through the first quarter of the second year and Cæsar is read during the last three quarters. A complete review of forms is found necessary in this year, and as exhaustive study of syntax as possible is made in connection with Cæsar. Text editions of Viri Romæ and Cæsar without notes or vocabulary are now in use in all classes, with what are felt to be excellent results.

In the third year Cicero's Orations against Catiline are read, with some historical study of the period, and study of Cicero's style. The formal study of Latin composition is begun in this year.

In the fourth year, five books of Vergil's Æneid and selections from the sixth are read. This is accomplished with the study of Vergil's style, fine passages are occasionally memorized, parallel passages from Latin and other literatures are read in class, and essays on themes suggested by the author read, and written translations of selected passages are presented. Latin composition is continued in this year.

The amount of Latin read in the course has been materially diminished within the past few years. The chief reasons for the change are the multiplicity of courses now open to students, and the advance character of the work now demanded in all departments. The study of Latin, it is believed, must ever be a difficult one, if it is to make

the expected return in training and culture. From the necessity of adapting the general course to the growing demands upon the students, with only limited time, has arisen the college Latin class. This class reads all the additional Latin required for college entrance, having three recitations a week during the fourth year. Pupils of this class make a more thorough study of Cicero's style and of the historical setting of his orations, make a careful study of the sixth book of the Æneid, and do more advanced work in composition.

MATHEMATICS.

Algebra.—It is believed that a successful effort has been made to teach the subject from a logical standpoint, development of principles being the constant aim. The pupils have been taught, step by step, the principles underlying every operation, and have developed the relation of principles of increasing breadth, while accuracy, proper arrangement, and clearness of statement have been constantly impressed.

Geometry (second year).—Book work has been made subservient to the "originals," and while the main use of the subject as a powerful mental drill has been kept constantly in mind, its practical application to numerical examples has suffered in no way. Here, as throughout the entire mathematical course, stress is laid on exact definitions, rigid logical processes, clearness of conception and expression, sustained courses of proof, exact results, the selection of the best methods, and the cultivation of the powers of insight, judgment, and origination, rather than of memory.

The analytic rather than the synthetic method of proof has been required as the most important, and in many cases the students have traced a proposition back to the primary definitions and axioms, proving all the intermediate propositions through which the line of direct proof extended. The synthetic method has been used as an adjunct, giving the student drill in the formal statement of a chain of reasoning, omitting everything that in any way interfered with its logical development.

Solid geometry and trigonometry (third year).—The third-year course is ample to prepare the student for any college he may desire to enter. The utmost care has been taken in arranging the work to secure conclusive checks and tests of accuracy exclusive of mere book answers, so that the student may be able to find out in his subsequent practical work in surveying just where the error arises and how he may correct it.

Surveying (third year).—The last quarter of the school year is devoted to this subject, two weeks of which comprise practical work in the field, thus affording a fair opportunity to acquire a working knowledge of the instruments and fundamental problems. Numerous parties are made up entirely outside of school time, and great enthusiasm is shown in taking advantage of the facilities offered for field practice.

Advanced algebra and analytical geometry (fourth year).—The course

in advanced algebra is identical with the requirements for advanced standing in Cornell University, and for admission to the courses in mechanical and electrical engineering and architecture.

The course in analytical geometry is extended for the amount of time devoted to it, and is somewhat in excess of the requirements for admission to Johns Hopkins University, covering the first four chapters of the text-book exhaustively and the following four in a more cursory manner.

PHYSICS.

There is without doubt no better field in the whole curriculum from which to reap a rich educational product than that afforded by science. Physics offers abundant material for the production of mind trained to the "habit of scientific thought," a product of far more value than any amount of knowledge of physical fact. As we realize this truth, as we are willing to direct the work of the laboratory so that stress is laid upon the development of logical processes, so we succeed or fail in teaching this branch.

It is during the first year in this subject that good or bad habits are formed and general principles developed that give color to all future work, and influence to a great extent the educational value of the training the science affo ds. Experience has shown that when pupils come to the laboratory to begin a course in physics they need training in many ways. These needs must be understood and met by the course.

It may be said with safety that the majority of pupils require training in (1) how to study; (2) how to use their knowledge of arithmetic, algebra, and geometry; (3) the formation of accurate conceptions; (4) the estimation of evidence of all kinds; (5) the ability to make logical deductions; (6) elementary ideas of induction; (7) manipulation and neatness; (8) the careful selection of words and the practical use of the English language.

This classification recognizes that the study of science in high schools should be regarded as a strong factor in a general and broad education; it indicates also that all scientific courses should take advantage of their splendid opportunity to supply apparent general needs of pupils. On the other hand, the largest technical knowledge can be imparted only by developing a science along these broad educational lines by pedagogical methods.

THE WORK OF THE LABORATORY.

In order that pupil laboratory work should give the best results it is essential that the teacher should do his part in preparing for the reception of his students. The rooms, tables, tanks, etc., should be in perfect condition, apparatus carefully classified and arranged in an orderly manner, and the cases in which the pieces of apparatus are stored when not in use should be arranged to present an attractive

appearance. Order should be the law of the laboratory; pupils should see examples of this law on every hand.

An ideal course in laboratory work would involve the pupil's progressing inductively, step by step, without the assistance of the instructor. Practice has shown that pupils must be taught to help themselves. With this object, the work at the first of the year is necessarily made up to some extent of experiments before the class to teach manipulation, of experiments with the class as the next step, and of experiments in which the class performs the manipulation and the instructor at the board shows how the record should be made. From the very beginning the two features of experimental work, manipulation and record, should be presented, discussed, and developed. Pupils should be taught to perform experiments accurately, and then to record their observations adequately.

After a few weeks pupils should master the problem of laboratory work and recording observations, together with certain physical principles. If this work is properly conducted the work for the remainder of the year should be comparatively easy, both for the pupils and for the teacher. The duty of the instructor is now to carry in his mind the work of each pupil. Broadly speaking, it should be the general supervision of a capable worker. It is at this point that science becomes interesting to the student, and he does not regret the hard work of the first few weeks.

Each experiment selected should represent an important physical fact or principle. If several experiments together exhaustively illustrate a general principle, pupils should be made to see this clearly.

Experiments should be performed quantitatively whenever possible; qualitative work has very small educational value. Pupils should be taught to express their ideas in equational form. Careful manipulation should be insisted upon and correct mental habits formed.

THE RECITATION.

The work in periods assigned to recitation should seldom be devoted to a mere "quiz;" these are for instruction and development, not opportunities for finding out how much knowledge the class has obtained from the text or the study of authority. At first the laboratory notebooks might be discussed in class with the books open. The experiment should be shown to be a question asked of nature. Errors in the records should be pointed out and correctness of form should be insisted upon. Pupils should be drilled in the choice of words in physical definition, and, although it may not be called by its technical name, the "connotation" of physical terms should be impressed upon pupils' minds. They should be taught that the acquisition, classification, and reproduction of knowledge are necessary to make it useful.

After ability to form physical concepts is acquired pupils should be taught to read—that is, they should be led to form the habit of picking out the important points of a chapter or in a given subject assigned.

Accuracy of observation may be tested by asking a pupil to draw upon the board the "outline" of a piece of apparatus.

Accuracy of conception may be tested by asking the pupil to express an English sentence or a physical idea in equational form. Such work tends to produce definite results, causing pupils to read carefully, to think rapidly and accurately, and to express thought readily.

If properly conducted, the work in physics should and will help the work in all other studies.

Five hours per week throughout the year are given to the subject, three to laboratory work and two to recitation. Gage's Principles of Physics, Hall and Bergen's Text-Book, and a Manual of Experiments prepared by the physics teachers are the books used in the beginners' classes. Students of the third-year class, second year of physics, use the same texts; fourth-year pupils, third year of physics, Atkinson's Ganot's Physics, Silvanus Thompson's Elements of Electricity and Magnetism, and a long list of reference books.

SPANISH.

The study of the Spanish language was quite recently introduced in the high school. The course is practical, no attempt being made as yet to study the literature of Spain. Grammar, conversation, and written exercises are included in the one-year course. The text-books are Edgren's Spanish Grammar, Cortina's Amparo, and Matzke's Spanish Reader.

THE BUSINESS COURSE PROBLEM.

A complete business course may be briefly described as giving a knowledge of (1) men, (2) things, (3) language, and (4) business; of human history and institutions; of nature; of means of expressing thought, and of business laws and methods.

A historical course which exhibits the general history of the race, its commercial history, the geography of commerce and the simpler laws of political economy, will include perhaps all that should be expected of historical training in a business high school.

Mathematics and the sciences, which constitute group 2, are so clearly defined in most high-school programmes that no explanation is necessary here.

In determining how much language shall be taught, attention must be paid to the fact that the course does not specially prepare for college or the learned professions. English should be emphasized; Latin should perhaps be taught for one year as an aid to English, especially in the derivation of words; and French, German, or Spanish for perhaps two years. Aside from its commercial value, which is far less in the United States than in Europe, and of itself would not justify retention among high-school studies, the chief use of a foreign language seems to lie in giving a better understanding of English by furnishing the tudent with material for comparison. In this connection

the following quotation from Macaulay seems especially appropriate: "If a man must terminate his studies at one and twenty we should in general advise him to be satisfied with the modern languages. If he is forced to enter active life at fifteen or sixteen we should think it best that he should confine himself almost entirely to his native tongue." Equally instructive is the statement of the chief reporter of the House of Representatives, who, after years of experience in recording the language of men of varying degrees of education, says in an article on the qualifications of the Congressional reporter: "Some acquaintance, not necessarily profound, with other languages, especially Latin and French, can hardly be dispensed with."

It is also worthy of note that drawing, the language of mechanical representation, is perhaps generally enough employed in business life to warrant its introduction.

Several essential subjects which are usually included in a high school course are nominally omitted from the foregoing sketch, although in reality implied. Thus, manual training, although subordinated to business training and to science, is almost as fully included as in a manual training course—the bookkeeping, penmanship, drawing, shorthand, typewriting of the business group, and the more original manipulations required for the experiments and comparisons of science, representing completely the manual phase of education. Logic, rhetoric, and moral training are implied in almost every subject, and are best taught in connection with the things or relations to which they pertain—are, in fact, quite likely to be poorly taught to the ordinary student when separated from the concrete and taught abstractly.

As a provisional course of four years, embodying the foregoing subjects, the following is suggested:

	First year.	Second year.	Third year.	Fourth year.
1. Business training.	Bookkeeping, arithmetic, and correspondence, Shorthand and typewriting (optional).	Bookkeeping, arithmetic, and correspondence, or Shorthand and typewriting.	Bookkeeping, arithmetic, and correspondence (optional). Shorthand and typewriting (optional).	Business law.
2. Language	English	Latin	French, English	French, drawing.
3. History	General history	Commercial history.	Commercial geography.	Political economy.
4. Mathematics and science.	Algebra	Geometry, physics.	Chemistry	Biology.

By comparing the present Business High School course with the preceding model, it is seen that the actual course is strong in group one,

indeed practically as complete in that group as in the suggested four-year course. Of the studies of group two, it has but English and drawing; group three is represented by short courses in commercial history and commercial geography, while group four is entirely absent. It is strong in the subjects which are of immediate business value, but weak in those which give breadth and depth of insight into the material world and human institutions.

Although the present course is theoretically deficient, it is as complete as school accommodations will permit. There is little doubt that a fair proportion of the students would now welcome an increase in the length of the course, but until more ample facilities are obtained it will be necessary to retain what is good and to hope for what is better.

In the following review of the work by subjects it will be noticed that effort is made to attain the maximum of educational benefit even from those subjects which may, at first glance, seem to be wanting in educational possibilities.

BUSINESS ARITHMETIC.

The knowledge of arithmetic required by a young man in business is principally that of number in its relation to everyday affairs. Problems do not come to him, for the most part, in stated terms, but so interwoven with things and processes of his daily experience as to make their solution a matter of a knowledge of general principles, as applied to business conditions. He must know what values to take, what to let alone; and from a mass of material, how to select only that which is essential. He must also, it is true, have the ability to handle figures with ease and facility, as a skilful workman handles his tools.

The course in business arithmetic, as given in the Business High School, aims to prepare pupils successfully to meet these requirements. The subject is taught primarily in its relation to the everyday affairs. The pupil gains his true working knowledge through the rational application of number, of things, and vital experiences. Thus he sees its true meaning and value, and his interest is aroused and stimulated.

The work proceeds from experience, naturally and easily, and the pupil comes to understand his subject, with its underlying principles, largely through his understanding of the things and processes to which it is applied.

But this work in no way precludes continual abstract mental drill, essential in securing facility in handling figures; nor the set reviews, problem work, and the tracing of principles through various processes, all so necessary as gymnastic and drill work. But these follow, instead of preceding the general method.

In the first-year course the aim is especially to cover all general subjects from a business point of view, and to secure careful analysis, logical reasoning, and proper expression. The recitation periods are, therefore, devoted almost entirely to mental work. The pupils are trained in the seeing of general or fundamental principles applied in

various ways to business conditions, and are trained to get results by the use of small numbers. They are required to personate parties to simple business transactions, to treat problems exhaustively, viewing them under varying conditions, and preparing concise statements of the results they thus obtain. Under this system of training the teachers are enabled to study the mental processes of the pupils, to strengthen their weak points, and to correct their errors. Home work on problems, and at intervals, written lessons, serve to fix in the minds of the pupils the knowledge gained in the general class exercise.

In the brief time devoted to the subject in the second year, the aim is, first, to review the preceding year's work, not so much subject by subject, as by general principles. Following this a severe course in business practice is given, in which pupils are placed, as far as possible, under business conditions, being required to personate parties to transactions, to prepare the necessary commercial paper, to make plots and diagrams, and even, in some cases, to write business letters.

This work proves especially successful in bringing out the fundamental principles of the subject, and in showing its relation to bookkeeping, business practice, and commercial law, with which the work is coordinated as far as possible.

BOOKKEEPING.

In this age, when commercial interests and commercial intercourse are constantly being multiplied, the need for bookkeeping is keenly felt and the demand for young men and women capable of rendering expert service grows more exigent every day. We can not cope with the problem of supplying this demand without a thorough recognition of the principles of practicality in order to make the students thoughtful business men and women, and expert accountants.

In attaining this ideal, the fundamental principles of bookkeeping should be discussed and unfolded in the natural order. That the student may understand fully the instruments of his work and may learn to use his tools, the instruction should embrace the nature of the books and business papers commonly employed. The student should be taught the use of the daybook, journal, and ledger; to make entries in each of these books, and not only to close, but also to interpret, the ledger when it may be necessary. A complete knowledge of drafts, notes, and all other papers, which come in the way of a business man, both as to their form and nature and their proper disposition in the bookkeeper's hands, must be given the student.

While the theory of the subject may seem simple, the actual practice presents many difficulties, taxing to the utmost the ability and judgment of the accountant. To prepare the student for these difficulties, practice sets, embracing all kinds of transactions from the simplest, in the first days of the course, to the most intricate and tangled, at the end, are put before the student. In this work, as far as possible, the

student is made to rely upon himself more and more each day, until at last he is able to keep a set of books and to solve problems far from simple without any help.

Thus is the student trained through successive, well graded, progressive steps, in a thorough observation and investigation of business principles, customs, and habits. Constant care is taken to inspire a desire for neat, legible, and rapid penmanship, and a love for neatness and order in the mental as well as in the material world.

The mental discipline gained is of great value, as it leads to knowledge and practice of ethics and economics, strengthens the love for justice and equity, and cultivates the judicial powers.

PENMANSHIP.

As penmanship and bookkeeping are so intimately associated, the proper performance of the one depending largely upon the other, the endeavor is made to emphasize the importance of good handwriting.

It is aimed to arouse in pupils a special interest in the matter of their handwriting by placing before them perfect models. Two sets of copies are prepared, one for the slant and one for the vertical writers. Exercises, calculated to please the eye and at the same time to enable the pupil to write more easily and better, are placed upon the boards in each section daily, and pupils are furnished individually at certain intervals with copy slips fresh from the mimeograph, which they may have before them upon the desk.

It is appreciated that good handwriting must embody legibility and speed. Without one the other is commercially valueless. As far as possible criticism is given individually of the forms of letters, position at the desk, and the movement of the hand and arm necessary to acquire ease and speed.

Taking the work of this department in its entirety there is reason to be encouraged, as the pupils, having their attention called to the defects in their own handwriting, strive earnestly to bring their work to the standard of the perfect models placed before them, and thus, by the elevation of their ideals, both consciously and unconsciously, they write more legibly and more easily.

SHORTHAND.

The launching into the business world of an intelligent body of stenographers presupposes much earnest and painstaking work. As a poor foundation means a weak, uncertain structure, the principles upon which the shorthand system is built must be well rooted in the understanding. The aim of the first-year work should be to make the pupils strong in the principles and their application. They should be trained to undertake fearlessly to write any word presented, and to make the resulting outline show an intelligent grasp of principles. Not only should the mind's conception be true, but the manual execution must

be clear and legible. The word signs should be thoroughly known, and it should be possible for the pupil to take easy sentence dictation intelligently. As stenography is of no commercial value unless the pupil knows how to spell and punctuate, he must be held responsible for the punctuation of his sentence work. Typewriting is a necessary correlative of shorthand, and the importance of accurate, neat transcriptions must be felt.

Of course, while these are the more tangible and immediate aims, yet the pupils must be made to realize the necessity of educating themselves as widely and as thoroughly as possible, since few professions presuppose such a universal, encyclopedic knowledge in order that a large measure of success may be met with. Indeed, because of the number who graduate from business colleges in these days, and the great competition, more is required for success of a very mediocre sort than mere manual dexterity and machine-like work.

To realize ideal results there must be awakened a fondness for shorthand, an appreciation of its utility and of its grace and beauty. This latter will not be accomplished unless good writing—accurate, carefully made notes—is insisted upon. There should be a gradual and systematic unfolding of principles—careful, logical development—on the part of the teacher. The principle is not mastered when the text has been memorized and a few illustrations written; copious illustrations should be given. Little encouragement in conscious memorizing of outlines should prevail; so much fresh work should be dictated that the pupil would never, save in word signs and contractions, think of bringing his memory into use; every outline should be the result of the mind working logically toward the application of right principles. The pupil is helped in his mastery of principles if he learns to recognize and group words having the same principle, being required to give quickly several words which involve the same principle as the word being written. The similarity in sound is then heard, and it becomes easier to recognize the need for written outlines similar so far as the principle in question is concerned. The knowledge of the word signs and contractions should be instantaneous, and here again, as far as possible, the pupil should be taught to group outlines contracted similarly, employing his reason that he may be able to form logical contractions other than those given. Reading of the shorthand notes goes hand in hand with the writing. Much board work helps toward the making of careful and readable outlines. Both the reading and the writing of shorthand notes is aided by encouraging the pupils to take memoranda of different lessons in shorthand, to make extracts from the books which they are fond of, to keep diaries, and write letters in shorthand.

In the second-year class the student finds a greater necessity than in the first year for a large and comprehensive vocabulary and a general fund of knowledge obtained from careful observation and reading of

standard and current literature. In a word, he must be proficient in English. Since words constitute the material with which he works, he must know words, their meaning and their force. He must understand how to use them in sentences and how to place these sentences in paragraphs.

To attain this proficiency special attention is given to sentence structure, paragraphing, spelling, and punctuation. Great care is exercised in the selection of such matter as possesses intrinsic merit. For example, parliamentary law is taught by dictating and transcribing the proceedings of an executive body, the pupil assuming the character of some member and reading his notes as if he were actually taking part in the proceedings. For the same purpose patent work is introduced by explaining the course of procedure pursued in obtaining a patent and dictating the specifications and different forms, which are subsequently transcribed. This is followed by the dictation of editorials, business letters, building specifications, and common-law forms used in the District of Columbia.

Finally, the pupil is made to feel that his knowledge of shorthand lies in his power to transcribe his notes on the typewriter quickly, neatly, and accurately. Although he may never use his shorthand in the business world, he has learned to cultivate his perceptive faculties, his memory, and above all he has learned the greatest of all personal achievements, the power to control himself.

TYPEWRITING.

The principal object of the typewriting classes is the transcription of shorthand. But, aside from the mere mechanical operation of the machine, the pupil is benefited in many ways. He acquires a practical knowledge of English, as none but the best models are set before him, and his spelling, punctuation, and paragraphing are required to be absolutely correct. Habits of attention, accuracy, and neatness are formed. The eyes and fingers are trained to quick and accurate movements. The exactness with which he is required to transcribe his shorthand notes and the attention to the neat appearance and arrangement of his work combine to make him observant and careful in details. Two years' drill in these matters greatly benefits all pupils, but especially those who design entering a business career.

After the pupil has learned the general management of the typewriter and has a fair knowledge of the use of the keyboard, the spacing, and carriage movements, and understands the adjusting of paper in the machine, the first step in learning to write is the fingering exercise, consisting of words in everyday use involving double consonants and other difficulties in spelling. From the repetition of these words a given number of times, strength and nimbleness is imparted to the fingers. This is followed by a number of exercises in punctuation and grammar. Business and official letters

are then given, so that the pupil may become familiar with different styles of correspondence. Much time is allotted to transcribing parliamentary proceedings, from which a just idea is obtained of the manner of conducting meetings of this character. The pupil is required to write, fold, and brief legal papers; to write patent specifications in the manner prescribed by the United States Patent Office, and, later in the course, to make tabular statements and itemized bills, correct matter which is badly arranged or improperly expressed, write letters from rough drafts, copy building specifications and selections from civil-service examinations.

At the end of the course the student is made thoroughly familiar with his machine in all its parts, that he may be able not only to clean it, as he has done since his first lesson in typewriting, but also to make any repairs not needing the skill of an expert machinist.

COMMERCIAL LAW.

The principles of commercial law are few, but their applications are many; a business man's knowledge of them must not be superficial. To give the pupils this legal knowledge from the familiar transactions of business life the legal principles underlying them are made clear. This is done through illustrations given by the teacher or through narration by the pupils of some transactions occurring in their bookkeeping, arithmetic, or English—Antonio's bond, for example. In all cases the pupils are referred to the text-books for confirmation of the developed principles.

When the pupils have thus obtained the principles from their own experience, or from their knowledge of business life, their powers of judgment are tested by the applications of these principles to matters of business, by model cases involving the principles under varied conditions. With each case are required the "doubtful legal point," the principles applying to it, and a decision.

As a further test, after the principles are known, the pupils are required to draw up all the legal papers involving the legal application of these principles to business, using the legal form for each instrument. Accuracy and neatness are required as essentials of each instrument. In this also, when possible, the matter is obtained from the coordinate studies of the course.

A review of the work done is made by requiring an outline and summary of each principle, and by discussing in class individual outlines, given by pupils, to discover the essentials of the principle under discussion. As the year advances, a correlation of all the principles which underlie the law merchant is gained and the student goes forth into business life, not as his own lawyer, but with a working knowledge of the ordinary forms of the legal instruments used in business life, and of the legal principles which govern the business world.

ENGLISH.

The pupil who would excel in any subject requiring expression of thought, either spoken or written, must have at his command the proper terms and must also know the best and most effective means of using these terms. This efficiency can be gained only by careful, systematic study and constant practice. Our aim is, therefore, so to graduate our work that this thorough knowledge may be acquired and the pupil really become master of a crisp, clear method of thought and expression, which shall not lack the elements of grace and beauty.

With this intention, the work begins with a careful study of the paragraph as a unit of thought and the sentence as the means of its development. This includes a study of the elements of the sentence, their position as compelled by the thought to be expressed, and their proper connection and subordination in the sentence; also a similar study of the sentence in the paragraph, emphasis being given always to clearness and force of expression. Here, also, punctuation is carefully reviewed and the pupil is almost daily required to do written work.

Types of the paragraph are next considered, i. e., narrative, descriptive, argumentative, and expository, each being analyzed for development of topic and selection and arrangement of thought. This study occupies the first quarter of the year, and is based upon Macaulay's Warren Hastings or De Quincey's Revolt of a Tartar Tribe.

From the paragraph as a unit, the study is extended to the connection of paragraphs in a narrative, beginning with short stories, reproduced, then extending to original short stories and finally to a more extended and elaborate effort, generally selected from several stories woven into a novel. Here stress is laid upon the necessity of careful selection of details. Text for this quarter, Dickens's Tale of Two Cities.

In a similar manner, description is studied in the third quarter, objects, persons, and places being the subjects for description. Here comparison and contrast are taught and beauty, clearness, and force of structure are always considered the standard of excellence. Tennyson's Idyls of the King is used as a basis for this quarter's work.

The work of the fourth quarter, a course in business letter writing, is perhaps more clearly adapted to a business school than that already pursued, yet it is believed that the previous training is a necessity in a good business letter. The series of letters begins with brief notes of application, recommendations, and letters of introduction, and is followed by a series of business letters on real estate, railroad business, and mercantile affairs, the latter including orders for goods, invoices, bills, duns, complaints, and letters explaining contested points in business relations. In all these exercises the outward form and execution are first considered, then the body of the letter is criticised for logical

arrangement and clearness of expression, as frequently in business much depends upon the correspondent's use of English. This work is supplemented in the first year by similar letters dictated to shorthand classes and transcribed in typewriting, thus emphasizing its importance.

During the first part of the second year, from the works of Shakespeare as a basis, the principles taught in the first year are reviewed by having the pupils select and outline and from the outlines write and recite the various stories interwoven to form the plot of the plays studied. Since the foundations of this work have been taught in the first year, more time can be given to the manner of expression, so that the pupil besides being able to express himself clearly may obtain some degree of force. As an aid to the thorough appreciation of the works of the great poet and the ability to understand and enjoy all good literature pupils are required to memorize the most beautiful passages of the plays and to consider carefully their scope.

In the study of Shakespeare the fundamental principles of argumentation are taught, and later, from Burke's Conciliation with the Colonies, as a sample of argumentative discourse, a more thorough and technical study of the subject is pursued. This work is especially beneficial to the pupil, since its immediate aim is to give him the ability to reason logically, to see the relation between cause and effect, a power necessary for success in the business world, yet one in which not only the average schoolboy but many far beyond the age of schooling are deficient.

In the latter part of the year the course which renders English training of the business school distinctive is taken up. This includes—

(1) A series of letters, involving business questions, by which the ability to write good letters gained by the pupil from the course of business letters taught in the first year is tested and strengthened.

(2) A series of letters incorporating descriptions of lost articles for identification, descriptions of persons for identification, and description applied to specifications for work to be done.

(3) A series of papers based on narration of process, including the narration of some simple process, such as the construction of a simple bookcase or stool, or the making of bread or cake, actually accomplished by the pupil himself, and the narration of a more complex process, such as the manufacture of paper, or the manufacture of ice by the Hygienic Ice Company, witnessed by the pupil.

This work is of such a nature that absolute accuracy in expression is indispensable; thus it forms an excellent test of the ability gained by the pupil in that line from his previous training, and forms a fitting climax for the course of study which is to prepare him for actual service in the business world. The written work based on the subject in hand, which is required throughout the year, affords ample opportunity for the teaching of spelling, grammar, and punctuation, points important for success in every calling.

While the preceding report gives the formal teaching of English in the school, it by no means covers the subject; for this work goes hand in hand with the instruction in every other branch. In order that any degree of proficiency be obtained in any department of study, the teacher must insist that the pupil express his thoughts accurately and clearly in good English, in itself one of the chief aims of all purely English instruction.

DRAWING.

First-year pupils desiring to do so may substitute for typewriting three periods a week in drawing. This is not a theoretical and mathematical course in mechanical drawing, but, like the other work of the school, is along practical lines. The aim is to teach in as simple a manner as possible that language of the business world which is most useful in all dealings with mechanics. There are few offices in which the employees do not frequently handle diagrams and working drawings.

Many of the pupils in these classes develop a taste which leads them to seek positions with patent attorneys and architects, and to make drafting their life work; others find employment in business places where such work is only a part of the employees' duties.

The course involves just enough theory of orthographic and isometric projections for intelligent work directly from models, never copies. From the models, chiefly portions of machinery, are made drawings, which are finished in india ink in accordance with the rules of the United States Patent Office. The alphabet in roman capitals is taught and the titles of the drawings are printed. Some time is devoted also to practice in reading drawings.

The graduate of the school who has completed this course, brief as it is, goes out into the world better equipped to meet the exigencies of business life than his fellow-student to whom a set of plans is more or less an enigma and who is unable to communicate his wishes to a workman, except by lengthy and usually confused verbal descriptions.

COMMERCIAL HISTORY AND GEOGRAPHY.

The idea of history teaching, wherever or for whatever direct purpose it may be taught, is, first of all, to develop power to interpret present conditions. The development of the power of analysis, the ability to see relations and analogies, the training of the power of selection for a purpose, and, finally, the teaching of the use of books, are aims constantly kept in view.

In the study and teaching of the History of Commerce the field is narrowed by the retention of one standpoint, but the opportunity for training along definite lines is increased. The immediate purposes in the teaching of commercial history are to give the pupils a view of general history from a commercial standpoint, with the ability to use this knowledge in their business lives by applying the broad teachings

of history to the conditions which they may meet, and to train them to think independently, to see relations, and to make decisions for themselves.

The course is divided so that the History of Commerce, (*a*) of Ancient and Mediæval Europe, (*b*) of Modern Europe, (*c*) of United States, occupies three quarters of the school year, the fourth being given to Commercial Geography, or the study of Modern Methods of Transportation and Communication, Exchange, Government Aids to Trade, and the Production and Consumption of the Products of Industry, finishing with a review of the trade of each of the important countries of the world.

The teaching is done largely by training in plan making, or putting into proper relation with one another the facts gained by study relating to an assigned topic and preparing for future study by making plans for investigation of topics. During the first two quarters this work is based upon the text of History of Commerce in Europe, by Gibbins.

After one unit of history—for instance, the Commerce of Mediæval Europe—has been built up according to the foregoing plan, reviews in the shape of essays on topics which trace one line of development throughout the whole period are assigned. Thus the power of selection for a definite purpose is trained.

The class work is criticism of plans by the teacher, this offering opportunity for training in thought, development with the help of the teacher of plans for new study, and recitation from outlines, this last offering opportunity for training in expression and criticism of both thought and expression by the class.

In addition to this, special topics for outside investigation and final presentation to the class give occasion for additional training to the ambitious student, besides giving to the class information which it could not gain otherwise.

The course after the first quarter, described above, is developed by the study in the second quarter of Modern European Commerce, which, because it may be studied more in detail than the previous work, offers greater opportunity for exercise in correlation and subordination, with deeper study into conditions and events affecting the development of trade. Then follows, with the previous training as a ground work, the study of the United States. This is topical study from the basis of an outline given by the teacher, supplemented by selected paragraphs and documents applying to critical or difficult passages in the historical development.

The fourth quarter's work follows logically all these. It is the study of modern commercial conditions entirely by special topics which develops an outline given the class at the commencement of the work. These topics are assigned to individual pupils, who are supplied by the teacher with skeleton outlines and required to make complete investigation of the topics, following this investigation by report to the class

Upon these reports the class depends for its information. This work is unified by class exercise in correlation and review, with occasionally a "quiz" examination. Thus the last work of the year is a summary in every respect of what has been done previously.

Not the least valuable phase of this final work is the training it gives the student in a sense of individual responsibility for his own actions and knowledge, and, in some measure, for that of others.

HEALTH.

Each year the work done by the health teachers among the girls has improved in character, scope, and results. Before beginning daily class exercises each student is carefully examined to discover any physical weakness or defect which might be increased by injudicious drill. The "vital statistics" so obtained are made the basis for the assignment of special remedial work, where curvature, lack of muscular development, hollow chest, and like defects are discovered. While a large proportion of the girls are found to be well formed and vigorous, these examinations occasionally reveal conditions which, although they have escaped the attention of parents and been regarded as of trifling importance by the girls themselves, show the necessity for the care of a physician and a special regimen to avoid serious weakness, deformity, or disease.

The expert judgment and the indefatigable and enthusiastic interest of the health teachers have been of great value for both the weak and the strong, developing the robust and opening the blind eyes of many a parent and child to harmful habits or pathological conditions.

Among boys there is probably less expectancy of a departure from normal health between the ages of 14 and 20. Less delicate physical organism, greater fondness for athletic sport, sex, and inclination for physical exercise would seem to give the boy a natural advantage over his frailer sister. These natural differences perhaps account for the fact that boys are left by the school authorities to grow up with physically perfect bodies or with imperfections, much as a matter of chance.

The teachers of the high schools foster and control athletic sports—football, baseball, tennis. Military drill gives magnificent development to those who may be inclined to this elective; boy fondness for rod, gun, bicycle, Saturday roaming in wood or field—all these are agencies to lessen the aggregate of morbid conditions, but are inadequate for their elimination.

Physical examinations of by no means an exhaustive character, conducted each fall for the enlistment of cadets, have shown too numerous instances of lateral curvature of the spine, undeveloped chest, with slight expansion, "lop shoulder," unilateral muscular development, defective carriage, under-vitality, and affected sight. The records of the health teachers show a similar state among the girls, with a large category of added nervous affections.

While it may be a question whether the responsibility devolves upon the school or the home to look after the general health of the child, there can be no question as to the school's accountability for the injuries to the normal health which it actually produces. Most of the defects cited are school-bred, the result of defective light, poor sanitary conditions, or bad position of body, tolerated in the class room.

The professional knowledge of teachers with regard to their duties in this connection has increased materially and rapidly in past years. The class teacher is helped by the health teacher, with her special training, the knowledge of parents is greater than a generation ago, and the construction and sanitation of school buildings improves every year. Yet, when judged by the results, the physical condition of a considerable fraction of the school enrollment, we have not done enough.

If we believe with the Chinese, that the doctor's duty is more the prevention than the cure of disease, then certainly there is a crying demand for the appointment of competent school physicians, whose responsibility shall be to see that no school building is ever in an insanitary condition, that the surroundings of every child both for study and play are such as tend to his physical welfare, and that the neurotic and morbid are properly guided and controlled, or removed from the injurious effect of work beyond their capacity.

THE MARKING SYSTEM.

The group system of marking has been in vogue in the high school for years. Quarterly grades have been given to all pupils in each study, as in the judgment of teachers they belonged to the various groups marked "Excellent," "Good," "Fair," "Deficient," etc. For convenience in issuing reports to parents and pupils, and for ease in keeping official school records, these groups have been designated by arbitrarily selected figures, 10, 9^2, 9, 8^2, 8, 7^2. While in general no ranking of pupils has been countenanced by the school, these figures were readily turned into per cent, from which competitive normal school, battalion positions, and scholarships have been awarded.

In practice this system, as is a fact concerning all "marking systems," whatever their unimportant variations, proved a driving spur to the ambitious who are anxious to excel for the pride of surpassing their competitors. It must be admitted also that it has proved a powerful stimulation in the hands of many teachers to those pupils who by nature are indifferent to their own progress or actually repel the efforts of the school for their development. This, however, has been shown by long trial to be but a meretricious advantage and a delusion to the teacher. Such artificial aid is only seemingly necessary to those who from inexperience are without resources for awakening in their classes that honest desire for acquirement upon which all valuable development must rest.

It goes without saying that many high-school teachers have had that intimate sympathy with the student, that professional keenness and

abundant resource which has enabled them to make use of the good and minimize the bad effects of the system; but even with strong teachers the interrelation of studies each with a separate instructor, and the multiplicity of standards in the large corps of instructors, produced results that were unjust to the pupil and apparently beyond remedy, were the system retained.

Perhaps the diversity of judgment in the attempt of a large body of teachers to interpret the same standards was not the cause of sufficient injustice and dissatisfaction to cause the abolition of the entire scheme of gradation, but there were positive and numerous educational evils directly attributable to it that demanded a complete revolution. A careful investigation of a large number of individual cases, extending over some years, had shown that much of the "breaking down" was caused by the desire for high marks and the eminence of school rank. Some ambitious students need the checkrein. The marking system served as the lash to drive them at a killing pace, frequently to collapse, in spite of the caution of teachers and the care of parents.

Many pupils, too, naturally conceived a most erroneous notion of the proper character of their school work—work which all too frequently, as a result, was planted only deep enough to secure the "mark;" only firm enough to last for the day. Nor were the evils limited to erroneous pupil ideals; many teachers were shackled by the dominating system, actually planning their daily class work that they might grade rather than teach their pupils. As an illustration, facts of history are important and must be learned by pupils. The teacher who is an unconscious slave to the marking system tests the memory of these facts by question and answer and records the result with an appropriate mark. It is far more important that drill should be given in arranging these facts in a cogent argument, in weighing conclusions, or in discussing the historical lesson to be derived. Such work gives opportunity for the sharpening struggle of mind with mind; for real training and growth. But as it is difficult to mark the product of such an exercise, it was seldom attempted.

At the beginning of the year the old system was abolished. Instead of the group, numerical system, the only record now given to pupils and parents is of "satisfactory" or "deficient" work.

The result of the change was anticipated with some trepidation; not a few teachers felt that it was a retrograde step which must result in disaster, lowering all proper standards and lessening all student effort. The year of trial, however, has confirmed the more hopeful belief that the new method would bring only better results, when conscientiously and intelligently put in practice. As one of the strongest benefits, it has forced a closer intimacy between teacher and student, demanded a greater knowledge of the mental difficulties of the pupil and his surrounding conditions for mental effort, and secured an individualism in the instruction of the weak that is the basis of all successful teaching.

Reports of principals and teachers show that there has been no falling

off in the effort of the taught, but rather a better kind of work and an improved product, while not a few young teachers have been professionally strengthened.

To educate 2,500 students through moral force and the inspiration of personal character exacts from the teaching corps the highest type of professional knowledge, the broadest resources, the keenest understanding of the young, and the warmest sympathy with the mental and moral temptations of youth.

That we have much of this high ability is already demonstrated by this crucial experiment. Further trial is confidently expected to extend the amount. The whole teaching force is now freed from the bonds of the marking system and struggling to develop mind and character of the highest order.

THE REGIMENT.

The annual competitive drill of the companies of the Washington High School Regiment occurred on the afternoons of Wednesday and Thursday, May 24 and 25, at the National Baseball Park.

After company exercises of the First Battalion, on the second day of the drill, there was a regimental drill and a concert by the Mount Pleasant Field Band. By the decision of the judges, Company A was awarded the distinction of winning the drill.

The city high schools have been in existence for twenty years; if they have in a measure fulfilled their mission to train brains and mold character we should now be able to see and judge their human product. When a great test of manhood comes like the clarion call to war we should find its graduates showing their caliber in stirring patriotism.

When in the early summer the First Regiment of District of Columbia Volunteers swung into Pennsylvania avenue, on its way to the front, hearts swelled with pride as the colonel, the military trustee of the school, rode by with adjutant, surgeon, and staff officers—all from the old school—and as each company passed scores of high-school cadets smiled a response to sad farewells.

At the Eastern School there is a faded flag of "blood and gold," torn from a roof as our army entered Manila and sent back by a soldier boy as a memento to his old school. Two former cadet captains from the Central School went up the hill in the desperate assault upon San Juan. In the Army, in the Navy, among the volunteers, at Santiago, at Manila, in the concentration camp, bearing his share of disease, wounds, and death, the high-school graduate was found, and side by side with him the undergraduate, from every course, year, and high school in the city.

Character, patriotism, self-sacrifice, manhood, for the cause of these we must look broader than to the influence of a single institution; yet the school may be modestly proud that these noble qualities were kept bright while these men were in her hand, so that their blazonry was splendid in time of trial.

CONCLUSION.

It is a pleasure to acknowledge for myself, and for my associates, the principals of the branch schools, and for all the high-school teachers, the uniform kindness and consideration which you have extended to us in the prosecution of our duties. I wish also to express my appreciation of the many courtesies of the members of the High and Normal School Committee, and of the assistance and guidance of the local trustees of the separate high schools, Mr. Job Barnard, Mr. Jesse H. Wilson, Mr. J. W. Whelpley, and Dr. Hazen, throughout the difficulties of administration.

Very respectfully,

F. R. LANE.

Mr. W. B. POWELL,
Superintendent.

DRAWING.

WASHINGTON, D. C., *June 30, 1898.*

SIR: The subject of the relation of drawing and art study to other branches of the curriculum is of such importance that it seems to me advisable to attempt in this report a presentation of its present status in our schools. I shall not attempt to present any ideal of what this relation may or should be; but shall only report what it is, together with a few suggestions as to immediate possibilities. That it must be intimate is necessitated by two conditions: First, that in our schools the ideal is that the development of each subject shall be planned with due consideration of its relation to others and of all the educational advantages to be derived from that relation; second, that art is so broad in its applications and possibilities of development that the attempt to cover all in a course of study restricted within narrow limits is resulting in many courses of study arranged for this subject either in an overburdened or a one-sided development. It is a vital subject for consideration how, in a proper correlation of studies, help may be received as well as given.

The first point of contact which we will consider is that with arithmetic, or number work, as it is styled in the lower grades. In this connection exercises in form study and drawing have been introduced into the primary grades through the adoption of Speer's and Giffin's arithmetics. These are nearly identical with those formerly given as part of the drawing course, including the study of measurements, the drawing and division of lines free-hand and by ruler test, practice in the use of the ruler; the study from models of surfaces, planes, edges, and the drawing of these free-hand and by measurement; measuring objects and drawing to a scale. All this is so interwoven with the number work that it forms an essential part of it. Out of this, and in the thought of the children for its use, grows constructive work.

Children make envelopes and boxes of different sizes and shapes, which are used by them to contain various materials pertaining to their work. They cover their books; make penwipers, sometimes with the geometric forms, sometimes taking for patterns leaves that they have drawn in connection with their nature work, the idea being to construct articles for use in the schoolroom. All this is thoroughly and accurately done under the supervision of the director of primary work.

Now, within the last few years, under the pressure of the desire to give more time to those exercises that develop the power of seeing apparent form and cultivate the imagination and the appreciation of the beautiful, there has been a tendency to eliminate these exercises, especially from lower grades. Those directors who recognize the intense activity of this desire to construct at the age the children enter school are loath to do this. The children's desires to construct and their ideals of results are at this time in advance of their ability. They want to know how, and if not helped will soon abandon their attempts. If these exercises have an affinity for and are helpful in number work, it seems to me that they have found their true connection.

In our exercises with material in lower grades we concentrate the attention upon other developments.

In clay—that plastic and genuinely artistic material, so precious to the creative mind because of its responsive quality, as it receives, retains, or changes at the light touch of the finger or tool the form he is striving to materialize—we strive for ideas and expressions of true and beautiful proportions, upon which all beauty of form depends. This does not come easily to the child, but he loves the material. He will work with it more patiently than with any other, and if we can present to and surround him with beautiful objects that depend largely for their beauty on this element and concentrate his mind on it we may hope to obtain even better results than in the past.

With tablets and sticks we seek for orderly and beautiful ideas of arrangement, imitated and invented, with colored paper for the same, with the added charm of color and the construction of ornament, historic and invented.

In geography constructive ability is used and trained to develop the idea of a map. Exercises are given in drawing plans of the schoolroom, school building, and adjacent grounds, streets, etc., of the route from school to the home and to other prominent points, and showing the locations of public buildings. In higher grades globe maps are made.

Drawing also finds its place in records of observations made in the field work. These, so far as I have seen, are drawings of sections showing the formation of soil as shown in various cuts found in the district. These are often very good and useful to both studies. More attention paid to them in the schoolroom than we usually find would add to their value.

Where manners and customs are the subjects of the lesson enterprising teachers who make collections of objects relating to the subjects have in their possession delightful subjects for drawing. Most of them are sufficiently interesting, from the artistic as well as the geographical or historic standpoint, to call forth the best efforts of the pupil. This line of work would well repay some specific attention. If a permanent collection of such objects could be made in each school building they would be of great value in providing a variety of subjects for drawing, connected directly with the studies of the pupils in geography, history, and literature. A case in each school building, set aside for the storing and care of such objects, with one or two as a nucleus, would, I am confident, result in a collection. There is nothing like a center and a vacuum for bringing together, and in this instance a certainty that what is procured will be properly cared for is essential.

Illustrations are requested from the pupils in connection with their studies in literature and composition. How we, as specialists, can give the best help in this work has been a source of much anxious thought to the director and her assistants, without arriving at any very satisfactory conclusions. A vivid conception of the subject, a knowledge of those elements of which it is composed that are suitable for graphic expression and the ability to draw, make the illustration possible. To these necessities we must minister—how best to do it is the problem. While the child is in that stage of his development which we may term the hieroglyphic, and in the conviction that he can do anything he is asked to do, the result is satisfactory. He has a vivid conception of the action and of the real—not the apparent—arrangement of the actors and essential objects. He is contented with the symbols he uses to express these. If any stupid adult desires an explanation, he is ready to give it. His sense of proportion is that the thing that has made the greatest impression on his mind must be the biggest. He is satisfied with the result, and if you are not he is simply grieved, disgusted, or angry, according to his temperament, feeling that you do not understand him or appreciate his work. But this is all changed as he grows older. His ideal of what a picture should be is changed. He is less self-confident, and hesitates to make the effort. When he does, he needs all the help and encouragement he can get. It is a source of satisfaction that the training in drawing our pupils are receiving enables them to do much fairly good work in this line, giving gleams of hope that some of the new exercises introduced into our drawing course will enable the pupils to do better work. The pose drawing, carried on quite successfully for two years, may be made to give more definite help. The work with brush and pen, as suggested by James Hall, has been productive of good results in many cases, and would have a direct bearing upon this work. Systematic picture study, in which a beginning has been made during the year, will also have its effect.

In the primary grades drawing is closely connected with nature study and composition, by the requirement that the knowledge gained through observation shall be expressed by drawings and written words. This connection brings us face to face with the peculiar problem involved in learning to see for the purpose of drawing. Professor O'Shea, in his address given before the art department of the National Educational Association at its last meeting in Washington, has presented so clearly the psychological truths underlying this problem that I feel impelled to quote:

Modern psychology has shown that the knowledge given by each sense is localized in distinct areas of the brain, but these areas are most intimately connected with each other by associated fibers or tracts. Knowledge acquired through one sense, then, readily becomes attached to that gained through every other sense, and the result is that, instead of having sight knowledge separated from muscular knowledge, feeling knowledge, and taste knowledge, we have it bound into the closest unity with these knowledges, so much so, indeed, that one does not distinguish between his sight knowledge of a thing and his other knowledges. * * * The result of this is that when a child looks at an object or summons it forth in imagination he thinks about its size, which he has gained through the muscular sense; its taste, which he has gained through the gustatory sense; and in addition he has all sorts of memories associated with the visual impression of the thing, and these crowd forward into consciousness and entirely monopolize attention. He thinks he sees these qualities in the thing, but of course he only infers them from certain visual aspects. * * * Upon the pupil entering school, then, and setting about to learn to draw, he encounters the great obstacle that he can see scarcely at all for the purposes of representation, although he may be exceedingly keen in his visual perceptions for purposes of inference.

Now, the child being in this condition, as are all who have not given special attention to the separation of their sight knowledge from other knowledges, the nature lesson tends to intensify it by the variety of observations involved, and the average teacher when giving the exercise in drawing proceeds to strengthen the union of all these sense impressions by giving to the class a review of the facts learned; as, The apple is smooth, it is red, it has a core, it has seeds, pulp, etc. The child handles the object and views it upon all sides, mingling all possible views in one vague idea. Of course all this is a hindrance and not a help to the desired result. For how do we learn to draw? To quote again Professor O'Shea:

The eye must by exalting its own importance separate itself from other senses for the time being, and carefully scrutinize the modifications of color which objects present to the eye or to the imagination. It must hold in abeyance old associations and wonted companionships, and dwell upon the visual appearances of things before it; not an easy task; but there is no other way known to man by which one may learn to draw. There can be little value in imitating flat copy, except, after the pupil has tried to represent the reality, when seeing how it has been represented may help to constrain his attention upon the visual aspects of the thing he is trying to draw. The inspiration and encouragement of seeing anything well done after one has essayed to do it himself is of no mean value in any phase of educational work, and is perhaps especially important in this. But copying from the flat at the very outset is useless, if nothing worse, for it does not give the pupil in any degree

the power to give attention to the color values of real objects when they are before him. The drawing of realities, then, which includes the realities of the imagination, as well as those external to the mind, is the primary requisite in order to cultivate the power to draw, because in no other way can a pupil learn to give conscious attention to the visual aspects of things.

The above quotations are given here because they throw light upon the methods that should be employed in conducting the drawing in the connection we are discussing. The objects used for nature study are valuable as subjects for training in drawing. They are a part of the child's environment, have become familiar to him, and, if the lessons have been properly conducted, appeal to his affections. These lessons have increased his powers of observation. Even if we admit that by them the difficulty of concentration upon the visual aspect is increased, it is not created by them. It is one that has been growing ever since the child opened his baby eyes, and is a necessity of his development. We have it to contend with in all drawing exercises, and why not here. But it is fatal to ignore it, for then we shall not provide for it, neither shall we be able to criticise justly the products. By not realizing the child's standpoint, we shall be apt to try to force results that can be only attained by intelligent leading.

The nature drawings are sometimes made in pencil outline and sometimes in color. Last year color was the medium principally used, the best of which were the water-color drawings. There has been a growing conviction in my mind that the legitimate evolution of the seeing of form as involved in representative drawing is through color. Impressions of form as obtained through the eye alone depend entirely upon the variations of color. One shape is not differentiated from another except through change in color. The light and the dark mass is revealed through the same change no matter by what it is caused. I believe that the order of training usually pursued through outline drawing light and shade to color should be reversed. The outline drawing is the result of an appreciation of values and can not be made by one not having this appreciation, but values are the result of color changes. The old order of development is also responsible for the difficulty experienced in teaching color to the adult who has spent years in studying form separated from it and for what is called lack of fine color-sense among the majority of people. Every child loves color, but until within a few years it has not been thought worth while to train this sense. Simply loving color does not enable him to recognize its infinite variations and harmonious combinations without training, which increases his sensitiveness to these. Only the child born into these perceptions, and in whom they can not be destroyed, comes into his inheritance. I can not in this paper elaborate this subject. I will only say that I think the results attained in the Washington schools by the use of color in the first four grades are worthy of thoughtful consideration.

It only remains to speak of the connection of drawing with those subjects under the supervision of specialists.

In the sixth grade we find that the girls receive, under the supervision of the director of sewing, a course in drafting patterns, which is admirably adapted to the development of the constructive ability when conducted, as it is in this case, on educational lines.

The close connection of drawing with manual training has been so elaborately presented in former reports that in this reference will only be made to that in the seventh and eighth grades with the shopwork. Working drawings are made in the schoolroom, instruction being given by the regular teacher. The execution of these in material is done in the manual training shops. One unit of work in these grades undertaken for the first time last year deserves mention for the interest it aroused in the pupils and for the results obtained. A course in geometrical design was given, the application being to inlays on boxes and other articles that the boys make in the shop, and to embroidery, principally of sofa and toilet cushions, and borders for gingham aprons. These were not only designed, but executed. It was a great lesson to the pupils in design, for they were brought face to face with all the difficulties involved in its application to space and material. A set of samples of the kinds of wood available was furnished to each school by the manual training teachers. About six weeks was devoted to this work. The pupils were enthusiastic, devoting every spare moment to it.

No use is made of drawing in other special studies, except by the teacher, for purposes of demonstration. No reference has been made to this use of drawing by teachers, because the specific object in my mind has been to note only the connection as related to pupils' work, but that it may not be inferred that no such use is made of it, I will speak of it briefly. A walk through our schoolrooms will show that the value of blackboard drawing as a medium for illustration and demonstration is recognized by the teachers. It is not every teacher who has the ability to do this, but special lessons in illustrative drawing given in the normal training school for several years, and also from time to time to classes of teachers, have given constantly increasing power and a growing appreciation of the benefits to be derived from its use. The use of pictures to illustrate subjects—so readily obtained in this day of reproductions—is naturally, to teachers whose every moment of time is precious, more attractive, but neither can take the place of the other; each has its peculiar advantages.

To picture-study, from the artistic standpoint, considerable attention was given during the past year by the director through lessons given to classes of pupils. More methodical work will be done in this direction the coming year for the purpose of calling attention to the great benefit to be derived from these lessons. A fine picture may be made a lesson in art and in history; indeed, in all directions it reaches out suggestively, gathering to itself and throwing out through one who can read it life, thoughts, and feelings. The response of the children is complete. Never yet have I seen the interest of a single child in a class of from forty to fifty children relax during an hour's lesson.

In two or three points the course of study was changed. Leaflets giving outlines of the course were sent to each grade once in three months. This was found necessary, as the last published course has become, through yearly modifications, misleading. These outlines were, as usual, only studies; methods were emphasized in teachers' meetings.

No exhibit was made except a small one in connection with a manual training exhibit held in Masonic Hall at the time of the meeting of the National Educational Association in July, but drawings, clay modeling, etc., representing a full line of work, were collected for our own inspection at the close of the school year.

Respectfully submitted.

S. E. W. FULLER,
Director of Drawing.

Mr. W. B. POWELL,
Superintendent.

PHYSICAL TRAINING.

REPORT OF PHYSICAL TRAINING.

WASHINGTON, D. C., *June 30, 1898.*

SIR: Before separating for the summer vacation of last year, the teachers of physical training met for the special purpose of broadly viewing the year's work as regards results, and formulating plans for the following year. Particularly did we search for weak points in the work as a whole, hoping, by renewed efforts along those lines, to strengthen the work in all its parts. At that time, while yet fresh in the mind, it was carefully noted wherein teachers as a whole could improve. These notes formed the basis of a general talk to teachers, which was given in every school division of the city. This talk we believe to have been specially helpful to the teachers, the suggestions being more general than those which could be given by the special teacher in the schoolroom.

TEACHERS' WORK.

Comparing the quality of gymnastic work in the schools during the past year with that of the year previous, we find that there has been a steady improvement. The number of teachers doing specially good work was more than doubled, there being an increase from 62 to 151, while out of the whole number of schools regularly visited, which was 585, only 3 were poor.

SUPERVISION.

We were most fortunate in being able to institute years ago a plan of supervision, to which has been due greatly the excellence of the work in our Washington schools. An arrangement was made by which each

school received its new lesson direct from the special teacher. In this way the pupil receives at the beginning the right concept of each exercise, presented by a trained specialist, and gets an intelligent understanding of the same. Otherwise the children might go on for days making errors in posture and execution until the special teacher comes to undo, if that were possible, that which the regular teacher may have carefully taught. It must be most discouraging to a teacher who has worked hard and faithfully, following obscure instructions from a book, to be told by the special teacher that that which she has done is wrong. One can imagine the feeling of irritation and the humiliation before her class which would follow the realization of having taught that which is incorrect.

In our plan the regular teacher sees the exercises given to her own class under the same conditions with which she must work daily, and, more than that, sees them presented according to the best method of the trained specialist. Another feature of the plan is that the schools are visited in rotation, and not on certain days, so that a class never loses its lesson, even if the program of the special teacher may have been broken in upon, but receives it in due course of time.

PRIMARY WORK.

Observation and experience, as well as the study of physiological development, teach us that the activities and emotions are strongest in childhood. Knowing this to be true, there should be as much freedom of motion and as great a range of activities as is possible in the primary school. Gymnastic plays and games afford the greatest opportunity for periods of such physical freedom and exercise. What we have attempted has been the body training of the child in keeping with the same system of physical training followed in the higher grades, but having the element of play as a means of interest. Action, imagination, and imitation, the chief characteristics of play, are ever present, accompanied by the essential element of joyousness. Besides which, a play or game, having for its purpose pure activity alone, as a game of racing or tag, was introduced into each lesson.

NORMAL SCHOOL.

The change in the plan of administration of the normal school, uniting it in one building and adding a year to the course, somewhat changed our scheme of work with these young ladies. Two years of theory and practice will undoubtedly give time for better preparation and deeper impressions along this as well as all lines of educational work, and increase the efficiency of the young women going out as teachers in onr primary schools.

REBECCA STONEROAD.

Mr. W. B. POWELL,
Superintendent.

MANUAL TRAINING.

REPORT OF THE DIRECTOR OF MANUAL TRAINING.

In my report for the school year 1896–97, which report was a discussion in part of manual training in general and in part of our own work, I made some observations respecting the "practical" character intentionally given the latter. The fact was noted that this characteristic had attracted some adverse criticism. Further consideration of this phase of the work and continued observance of the attitudes of some of our critics, as indicated by their statements and, perhaps to a greater extent, by their work, has led me to wish to say another word upon the subject, it being understood that shop work alone is referred to.

In the report cited the attempt was made to show that the zealous advocacy of manual training by public-spirited private individuals, as well as by school men, was at first largely due to their belief in its practical value. While it rapidly found favor on this ground with the general public, its growth in the public schools was probably retarded thereby. This argument gave place, among educators especially, to that based on educational grounds. As introduced during several years thereafter, however, the material side of the work remained much the same, although aims and methods took on new meanings: the point of view was entirely changed, but in the majority of cases the object viewed was not. It can not be denied that decided educational gains were secured before the point of view changed any more than that far richer results have been possible since. This change made possible a tendency which other influences have aided and which has effected gradual modifications of the early forms of the work.

The first of these influences to be strongly felt was the necessity of securing greater economy. Then came the desire to give the work a higher artistic standard, to make it a better medium for inculcating and expressing art ideas. Both these influences have accomplished great good, chiefly, so far, in inducing more widespread and careful study of the problems. The fruits of this study are commencing to be seen, here and there, enough to insure confidence in the outcome.

I believe, however, that a comparison of the earlier courses, as a whole, with the later ones reveals a degree of vigor, or of strength-giving ability, in the former not found in the latter. While securing decided gains in some respects, particularly in those named, it appears that sufficient care has not been taken to preserve the strength of the early work. I am not sure but the work which shows the most modification, which to the greatest degree evidences gains in economy and in artistic feeling, one or both, has suffered the greatest loss in the other respect. This loss of vigor lessens the possible ultimate value to the pupil of his shop experience, which is only another way of saying that it lessens its practical value.

The doing of something just as the mechanic does it seems to be a

bugbear to many. But it does not follow that in teaching the boy to do what the mechanic does we teach him as the mechanic would teach him, or for the same reason, or with the results limited to the thing produced. And yet we must not forget that the training of the boy, involved in the making of things, is not the only result obtained. It is the most valuable one, but it is not the one which appeals to the boy. The result which he sees, he measures by outside standards which ought to suffer as little as possible in the comparison, otherwise the value of the result for which we are really working is likely to be diminished. We can not disassociate in the boy's mind this school work from actual work, nor should we attempt or wish to do so; a proper union strengthens both.

The problems suggested by these observations are greatly complicated, owing to the conditions under which manual training exists, varying from those of the small, isolated country town to those of the large city. It is not to be supposed that the same kinds of work or similar courses of the same kind are equally available everywhere. The points mentioned here are of very general application, however.

It may be well to keep in mind that criticism is often due to lack of proper familiarity with controlling conditions. And perhaps the dangerous tendencies noted are the lesser of two evils, but that is as yet largely a matter of personal opinion. The work we are devoted to, however, is so far-reaching in its possibilities for good, both in the school and in after life, that it is well, in viewing it, to occasionally change the background so as to see it in its relations to both present and future.

I do not forget that all the details of our own work are not yet what it is thought they should be, but, as you are aware, contemplated changes have been deferred for reasons of expediency.

The meeting of the manual and industrial section of the National Educational Association and the meeting and exhibit of the American Manual Training Association occurred so soon after the close of the school year that mention of them seems to belong to this report. There was much inspiration to be derived from both meetings and exhibit, and not a little valuable information. The individual exhibits were larger than I had expected, but were fewer in number than I had hoped would be the case. Even among so few, however, there was shown a remarkable difference in material content. Almost every exhibit stood for some one idea over and above anything else, thus making the whole an extremely interesting study. There was shown work for every grade, from the kindergarten through the high and normal schools.

The year has been quite a satisfactory one for us. It is not possible to do so nearly right by every boy that there is never a cause for regret, but each year sees fewer such causes. As a general thing the work was strong and even. You are aware, from personal inspection, that the

county work has greatly improved in recent years; it is now strong and vigorous for the most part. Conditions at some of the outlying shops are against rapid growth, but in time it will come out right.

The new lines of effort opened to the work, in design, of the regular drawing and clay modeling have proved of great help to our work in inlaying and carving. The former has been especially benefited, and after the experience of the year the result will be still more valuable.

Our carving is of so elementary a character, taken up, as it is, only for the simple decoration of articles constructed, that the aid given by the designing in clay is, and will likely remain, less direct, because, for the most part, the designs are too elaborate for our pupils to execute, literally, in wood; both time and ability to do this are lacking. This is not a fault, in any respect, of either branch of work, being due to conditions, nor does it detract largely from the value to the woodwork of the work in clay. In one way this indirectness is an advantage, in that it necessitates greater care and skill in adaptation of design to material—a task which the acquired familiarity with principles and material permits.

If this new departure proves of as much value in the drawing as it seems likely to do in the woodwork, a decided gain will have been made. There is good reason why it should thus be mutually beneficial, for it provides the work in design, both with geometrical and natural forms, with a new material. The inlaying is done with various woods, hence the question of color enters into the work, giving it additional interest and value. Each eighth-grade teacher was supplied with mounted samples of these inlaying woods for the guidance of the children. Some of the designs are worked out in water color or crayon, some by line shadings indicating the different woods, some in black and white, and some only by outline. The variety and quality of these designs were astonishingly good, considering the fact that it was the first attempt. It furnishes additional evidence of the degree of readiness and elasticity to which the pupils are brought by the variety and the methods of the school work. They are not trained in ruts, either in thought or in work, and when called on are able to strike out in new directions, meeting the requirement with good judgment.

The high-school work suffered again in part for lack of the additional teacher asked for, but it was carried out with steadiness and certainty.

The war with Spain robbed us of the services of Mr. Hayes and Mr. Skinner for the last two months of the year, as they accepted commissions in the regiment which has gone from the District under the leadership of the chairman of the manual-training committee of the board, Colonel Harries. The representatives of manual training in the war were not limited to these, however. Nine of our machine-shop students are at work in the gun shops at the navy-yard, four having left school to enter there. We are proud of the patriotism and of the ability shown, respectively, by these teachers and students. They are all aiding the

war, both "the lad who the broad sword wields" and "the lad who makes it." If in a good cause, it is not necessary to decide which best deserves praise. The country will give honor to the men on the bridge and to the "men behind the guns." Will there not be a share for the men who made the guns? They, at least, at Manila and at Santiago, have thundered the praises of their makers as well as of their masters. And they have said more—they have told the Spaniard and the world that the nation which can make the best guns can use them to the best advantage. It requires a mechanic to build a machine such as the modern warship is, and it requires a mechanic to direct it. The best mechanics, whether in the shop or on the ship, are winning in this war, and a better civilization for a distressed people awaits the result of their skill. The oft-told story of national progress is to be repeated.

Inspired by the object lesson of the war, which shows that the very safety of the nation depends on her mechanical resources, Congress has given us an appropriation for a new building for our high-school work. It is a better investment, even in the midst of the war, than a new battle ship—it would be were it to cost as much. Thus aided, it is to be hoped that, by the time the country is again impelled to war, for every one we have sent to help equip her fleets we shall be able to send ten; or, better yet, that before that time can come, many times ten shall help to place the country in a position in the world where the potential force of her resources shall make her impregnable. Advance in the arts of war, and in ability to wage it, now follows the development of the arts of peace.

I append some figures relating to the past year's work:

Number of seventh-grade boys enrolled in city shops at the opening of school	835
Number of eighth-grade boys enrolled in city shops at the opening of school	761
Number of boys enrolled in high-school shops at the opening of school	177
Number of boys enrolled in county shops at the opening of school	263
Total enrollment at the opening of school	2,036
Total enrollment at the close of school	1,711
Average enrollment	1,873
Cost of maintaining 4 high-school shops	$891.42
Cost per pupil (average enrollment, 167)	$5.33
Cost of maintaining 10 city grammar-school shops	$2,254.47
Cost per pupil, grammar school (average enrollment, 1,458..)	$1.54
Cost of maintaining 8 county shops	$485.18
Cost per pupil, county (average enrollment, 247)	$1.96
Total cost of maintaining all shops	$3,626.07
Cost per pupil (average enrollment, 1,873)	$1.93
High-school shops, 624 and 626 O street nw. (principal, Mr. A. I. Gardner; assistants, Messrs. R. B. Hayes and F. E. Skinner):	
Machine shop—	
Boys from the third and fourth year classes, Central	50
Cost of repairs, supplies, and new tools	$614.50
Forging shop—	
Boys from the second-year classes	50
Cost of repairs, supplies, and new tools	$212.63

High-school shops, 624 and 626 O street nw., etc.—Continued.

Wood turning and pattern shop—

Boys from the first-year class	77
Cost of repairs, supplies, and new tools	$203.04

Drafting room (for all pupils receiving instruction in above shops), cost of supplies $116.25

Grammar-school shops, bench work:

624 and 626 O street nw. (instructors, Messrs. P. L. O'Brien and H. B. White)—

Boys from the Abbot, Henry, Morse, Polk, Twining, Seaton, and Webster schools	275
Cost of supplies, repairs, and new tools	$557.36

Blair School, I street, between Sixth and Seventh streets ne. (instructor, Mr. R. T. Pumphrey)—

Boys from the Blair, Hamilton, Hayes, Madison, Pierce, and Taylor schools	162
Cost of repairs, supplies, and new tools	$204.64

Gales School, First and G streets nw. (instructor, Mr. J. A. Montgomery)—

Boys from the Arthur, Blake, Gales, and Taylor schools	130
Cost of repairs, supplies, and new tools	$154.24

646 Massachusetts avenue ne. (instructor, Mr. J. K. Potter)—

Boys from the Carberry, Maury, Peabody, and Towers schools	172
Cost of repairs, supplies, and new tools	$236.87

Seventh and G streets se. (instructor, Mr. J. A. Degges)—

Boys from the Brent, Lenox, Towers, Tyler, and Wallach schools	177
Cost of repairs, supplies, and new tools	$123.05

Jefferson School, Sixth and D streets sw. (instructor, Mr. E. J. Dakin)—

Boys from the Bradley, Greenleaf, Jefferson, and Smallwood schools	165
Cost of repairs, supplies, and new tools	$186.75

Thomson School, Twelfth street, between K and L streets nw. (instructor, Mr W. R. Sheid)—

Boys from the Dennison, Franklin, Harrison, Phelps, and Thomson schools	153
Costs of repairs, supplies, and new tools	$368.19

Force School, Massachusetts avenue, between Seventeenth and Eighteenth streets nw. (instructor, Mr. F. Schweinhaut)—

Boys from the Adams, Berret, Dennison, Force, and Weightman schools	180
Cost of repairs, supplies, and new tools	$277.18

1359 Thirty-second street nw. (instructor, Mr. T. W. Fuller)—

Boys from the Addison, Corcoran, Fillmore, Grant, and Jackson schools	182
Cost of repairs, supplies, and new tools	$172.09

Van Buren Annex, Anacostia (instructor, Mr. E. F. Pywell)—

Boys from the Van Buren and Van Buren Annex schools	35
Cost of repairs, supplies, and new tools	$72.44

Hillsdale School, Hillsdale (instructor, Mr. E. F. Pywell)—

Boys from the Birney, Garfield, and Hillsdale schools	49
Cost of repairs, supplies, and new tools	$36.76

Anacostia Road, Benning (instructor, Mr. E. F. Pywell)—

Boys from the Benning School	12
Cost of repairs, supplies, and new tools	$14.16

Grammar-school shops, bench work—Continued.

Benning Road School, Benning (instructor, Mr. E. F. Pywell)—	
Boys from Benning Road School	12
Cost of repairs, supplies, and new tools	$13.49
Mott School, Sixth and Trumbull streets nw. (instructor, Mr. F. L. Harries)—	
Boys from the Military Road, Mott, and Wilson schools	37
Cost of repairs, supplies, and new tools	$104.60
Johnson School Annex, Mount Pleasant (instructor, Mr. F. L. Harries)—	
Boys from the Johnson and Monroe schools	64
Cost of repairs, supplies, and new tools	$81.31
Brightwood School, Brightwood (instructors, Messrs. F. L. Harries and E. F. Pywell)—	
Boys from the Brightwood School	27
Cost of repairs, supplies, and new tools	$93.44
Brookland School, Brookland (instructor, Mr. F. L. Harries)—	
Boys from the Brookland School	25
Cost of repairs, supplies, and new tools	$68.98

July 15, 1898.

Very respectfully,

J. A. CHAMBERLAIN.

Superintendent W. B. POWELL.

NORMAL SCHOOL.

JUNE 30, 1898.

DEAR SIR: The following report is herewith respectfully submitted:

The Washington Normal School is a unit representing, as faithfully as the combined conditions permit, the aims, the work, and the spirit of the system which it crowns. It must, therefore—and does—draw immediately upon the head of this system for direction, for interpretation and, oftentimes, for inspiration, to the end that its products, as teachers, may prove strong, comprehending, and rich instruments for the execution of the plans bearing upon the education of the children of our city.

The school, divided as it is, like other normal schools, into two parts—professional and practical—takes its material, on the one hand, from the Washington high schools, and on the other from the graded schools of the city. The high schools, from among those of their graduates attaining a certain average of scholarship during the four years of their course, and by the immediate means of a competitive examination, send to us each year 50 pupils for professional training. Nothing else, save an age requirement of 18 years for these candidates, serves as a qualification. Nine schools, covering the first four grades, are given for the purpose of securing to these pupil-teachers practical intelligence and skill. These two departments, which comprise the Normal School, are in one building.

This year completes, for the first time, the two-years' course of instruction so prudently provided by the board of education. Already

have the efficacy and wisdom of this measure proved themselves. The pupil-teachers have by it gained a truer and broader knowledge, a clearer sight into the meaning of human development, a firmer possession of themselves, and a keener sense of the relativities, and so of the obligations of their profession. There is but one mind as to the value of this extension of time for preparation.

Operating under this new plan the school has, logically, somewhat reshaped itself. Roughly outlined, the pupils of the first year have been engaged in study, those of the second year in practice. Literally, the pupils of the first year have practiced some; those of the second year have studied much. Definitely given, the first year's work consists of—

1. Subject study.
2. Child study.
3. Building a course of instruction with 1 and 2 as a basis.
4. Practice.

The first point covers a study of the subjects taught in the grade schools of the city. (These subjects may be seen by reference to the course of study in use in our schools.) This is, in large part, a review, as the pupil-teachers come to us, in the main, well prepared in scholastic equipment. Our first task is, perhaps, to displace the superficiality imposed by youth, with its preoccupations and unthinking conditions, with a thoroughness of grasp and an earnestness of thought demanded by the work which these pupil-teachers are so soon to do. Here, for the first time, another purpose in learning appears. The knowledge gained during the foregoing years is now to serve, in part, as a means by which others are to be brought as near as possible to the full measure of life—that actual clamoring life outside which constitutes the truest as well as the sternest judge of what are known among us as our educational theories.

With this new purpose in mind, the first need of the pupil-teachers is that they feel the importance of securing for themselves exact knowledge cast in broad lines. For this there must come a tensioning of the moral and intellectual fiber while they set to it to separate that which is known from that which is only thought to be known. The first year concerns itself much with this kind of effort; testing, reexperiencing, gathering authority, proving and broadening applications, by all of which a stable foundation is placed upon which to build the more purely professional structure. Besides this close study for the sake of correcting error, strengthening weak points, and grasping broader lines of meaning, there is also another purpose in thus again going over the subjects taught in the schools. This is that the items of which each subject is composed may be gathered into the units or groups constituting it, and that these, in turn, may be measured and realized as parts only of a still greater entirety. The chief value of this is that the pupils come to feel the completeness, the oneness, the

balance, and the order existing in every unit of work, and that they acquire the habit of searching for these relations in whatever they are set to do. Through this training they learn to sense the essentials by which they are to stay, as they separate them from the nonessentials, which should engage them less.

In this first year, too, they learn where to go for knowledge material. They soon discover that a part of knowledge may come at first hand—and must—but that another part, as truly of necessity, comes at second hand. They study the nature, value, and relations of these two sources, applying this intelligence at once to their own practice in learning. They are shown where to go for information. The botany, geology, physical geography, zoology, including ornithology, and physiology, are taught in large part by the use of the different museums of the Government service, by the town itself, with the adjacent country—all this known as field work—and by the public libraries. The pupil-teachers, under guidance, have made a special study of such of the educational facilities of the city as can be of service to them in their own teaching.

In connection with this point we stand eager to make grateful acknowledgment to the officials of the different Departments, who have by their unvarying courtesy and patient attention greatly assisted us in this direction. We thank them, too, for the valuable publications which have, from time to time, been sent to us upon our application. We realize with gratification the opportunities that we, as residents of this particular city, have to place our school in definite relations with so much that constitutes the real life and spirit of the country, and to use these as a means of culture and power for our pupils.

Another line of thought actively engaging the pupil-teachers of the first year is the consideration of people in their relations to others. The definite putting of one's self beside others as an element of power in a common life is easily seen to demand something to be added to intellectual excellence and moral integrity. Physical perfection, coupled with a strong and attractive personality, are factors to be counted and gained if possible. The physical culture, the music, and the physiology contribute strongly to a higher standard in this direction. There are, in addition to these definite means, numberless incidental ways of developing this power—the self-holding or poise, with its sense of security in one's self, that gives such stability and beauty to the mind and body controlled and directed by it. In this connection too much can not be said in commendation of the influence of the work of the directors of music and physical culture. The physiology also has aimed directly toward more intelligent personal habits, for a better building of the bodies of the pupils.

Attention has been called, persistently and pointedly, to the value of the externals—to dress, to manners, to the bearing of the pupils toward their associates, under the conviction that these items can not

safely be ignored by the teacher. As another means of developing strength, the pupil-teachers have been expected to control themselves. There are no monitors in the normal school. Its members know why they are here. This, with a sensible conception of the rights of others, settles the matter of attention to duty in an earnest and businesslike way, without the childish plan of supervision on the part of the faculty The pupils themselves generally settle the matter of attendance. Applications for permission to be absent are commonly thrown back upon them for settlement—since they alone can know both sets of controlling conditions—with the very gratifying result that absences are known to occur only under pressing necessity.

The second point—the child study—of the first year, which is carried on in connection with the study of subjects, is cast in broad and general lines. The pupil-teachers visit the practice schools daily to observe that alone which they are then able to observe—the common and obvious characteristics of child development. At first, because of the newness of the work and the necessity for time in the absorption of ideas, they are not frequently called upon to discuss their observation, but are instead left to gather what there is there for each of them. Soon the larger and cruder features come to the surface. These are talked over in their significance and bearing, and, subject to revision in the light of further experiences, are placed in a working scheme for the guidance of the pupil-teachers. A clear purpose of child study at this point is to discover what the child has in himself with which to learn. An understanding of this determines the nature of the work which he can do, and to a great degree dictates the way in which it shall be provided for his use as knowledge material. Soon the students see the application of a fact already discovered in connection with the study of their own learning—that there are but two sources of information; that whereas they, at their stage of development, gather the larger part of their store from secondary sources, the younger child must take his ideas at first hand. This period of doing, of experiencing, of physical activity of the earlier years of school life, is found to be in simple obedience to the possibilities of the child's growth, making the only sound basis for a true grasp of the knowledge lying outside the range of the senses.

From these broad lines of child study the pupil-teachers pass to a careful consideration of individuals, each with his peculiar setting of inheritance, environment, and habit, for the purpose of learning to adapt general means to the particular needs. The steady aim has been to secure to the students the broad fundamentals of the mind's nature and growth, that they may build from these true, efficient, and provident means for the training of children.

The next point, logically based on those already given, is the careful building up, grade by grade, of those bodies of work suited to the physical and mental needs of the children composing these different grades.

Experiences in teaching follow this. These are gathered by giving single lessons, or, at most, a series of lessons, as the pupil-teachers of the first year have at no time complete charge of a school. All lessons given by them are carefully observed and measured by purpose, plan, and execution. Suggestive lessons are often given for the members of this class by different ones of the Normal School faculty.

This is the work of the first year. As we understand its purpose we have made our strongest effort to have it work up to intelligence, culture, and power for these pupils.

The work of the second year, most briefly stated, consists of teaching the grades of the practice schools and of strengthening the experiences thus gained by further and more detailed study of both subjects and children. The opportunities for teaching are multiplied in many ways to increase the actual practice of the pupil-teachers in every possible way. While teaching by the pupils of the first year is only occasional, here in the second year it is sustained and continuous, throwing the burden of the work in the schools for practice upon these pupil-teachers. The supervision of them is no less careful, but much more general, requiring them to assume greater responsibilities in plans, in teaching, for results from these, and in all the interests, both physical and mental, of the children intrusted to them.

The extension of the course has given them the leisure to shape and put into order the crowding newness of the previous year; time to know the children and to become interested in them; time to feel their own ignorance, with time, too, to gratify to a certain extent the desire to replace this by a larger intelligence and a truer wisdom.

This added year is a good gift, whose value will, we are sure, be felt strongly through the increased efficiency of those to whom it was given.

We make grateful acknowledgment to you for careful instruction, for timely advice, and for hearty sympathy in every effort of ours toward the betterment of the Normal School.

Very respectfully,

IDA GILBERT MYERS,
Principal.

Hon. W. B. POWELL,
Superintendent of Public Schools.

COOKING SCHOOL.

DEAR SIR: I herewith respectfully submit a report of the cooking department for the year 1897–98.

The work is carried on by a corps of 12 teachers, 1 of whom is the director, in school kitchens, which, with 3 exceptions, are located in school buildings, hence are well lighted and ventilated.

During the year teachers' meetings were held each month, at which the work for the succeeding month was outlined and discussed and a

report of the preceding one given, thereby securing greater uniformity in the work throughout the schools.

Following is a list showing the locations of the school kitchens, number of pupils taught, and cost of supplies:

Force (Miss E. W. Cross, teacher; received pupils from Force, Adams, Franklin, and Thomson; taught 14 classes—7 seventh grade and 7 eighth grade):
Whole number of pupils 236
Amount of grocery bill $89.92

Dennison (Mrs. A. C. Pollok, teacher; received pupils from Adams, Dennison, Berret, Harrison, and Phelps, and at the Mott from Wilson; taught 14 classes, 8 of which were seventh grade and 6 eighth grade):
Whole number of pupils 231
Amount of grocery bill $78.36

609 O street nw. (Miss Marian White, teacher; received pupils from Henry, Polk, Twining, Morse, and Blake; taught 14 classes, 8 of which were seventh grade and 6 eighth grade):
Whole number of pupils 225
Amount of grocery bill $54.28

Seaton (Miss A. M. McDaniel, teacher; received pupils from Seaton, Gales, Arthur, Blake, and Webster; taught 15 classes, 8 of which were seventh grade and 7 eighth grade):
Whole number of pupils 259
Amount of grocery bill $80.44

Taylor (Miss Margaret Keogh, teacher; received pupils from Taylor, Pierce, Blair, Hayes, Madison, and Hamilton Road; taught 15 classes, 8 of which were seventh grade and 7 eighth grade):
Whole number of pupils 237
Amount of grocery bill $71.57

646 Massachusetts avenue ne. (Miss M. J. Merillat, teacher; received pupils from Peabody, Carbery, Maury, and Towers; taught 14 classes, 8 of which were seventh grade and 6 eighth grade):
Whole number of pupils 211
Amount of grocery bill $65.67

Wallach (Miss Florence Jenkins, teacher; received pupils from Wallach, Towers, Lenox, Brent, and Tyler; taught 15 classes, 7 of which were seventh grade and 8 eighth grade):
Whole number of pupils 230
Amount of grocery bill $80.04

Jefferson (Miss M. E. Davis, teacher; received pupils from Jefferson, Bradley, Greenleaf, and Smallwood; taught 15 classes, 9 of which were seventh grade and 6 eighth grade):
Whole number of pupils 216
Amount of grocery bill $75.57

3104 P street nw. (Miss F. Y. At Lee, teacher; received pupils from Addison, Jackson, Fillmore, and Corcoran, and at Tenley from Tenley; taught 15 classes, 8 of which were seventh grade and 7 eighth grade):
Whole number of pupils 189
Amount of grocery bill $72.95

Grant (Mrs. M. A. Burns, teacher; received pupils from Grant and Weightman; 4 seventh-grade classes, 4 eighth grade). Mt. Pleasant (Mrs. M. A. Burns, teacher; received pupils from Johnson and Monroe; 3 seventh-grade and 3 eighth-grade classes):
Classes taught 14
Whole number of pupils 188
Amount of grocery bil $76.19

County (Miss J. P. Wilkinson, teacher; received pupils at Bennings Road, Anacostia Road, Van Buren annex, Hillsdale, Mott, and Brightwood; taught 13 classes, 7 of which were seventh grade and 6 eighth grade):	
Whole number of pupils	174
Amount of grocery bill	$74.99
Number of pupils taught in all schools	2,396
Total cost of groceries	$819.98

The teaching of cooking, which was begun as an experiment in the schools of this city eleven years ago, has become a well-established part of the work here as it is in many of the public schools and colleges throughout the country. In some of these it forms a part of the science course, pupils making their own experiments and investigations as in all science work; in others it is taught simply as a mechanical art, without reference to the correlation of the sciences, while in our own, as well as in some others, it is taught as an applied science. Simple experiments in chemistry and physics, which demonstrate the underlying principles of all cooking, are made by the pupils, then applied to the preparation of some dish. The wisdom of this method has been more clearly shown by the success of the work during the year just ended than ever before, for during this year a greater number of such experiments were made, by which the pupils have gained a clearer and more thorough knowledge of the effect of heat upon the food and the amount of heat and length of time required to cook the food properly, and by which also the pupils have learned the dietetic values of such food. There was also a marked improvement in the character of the recipes made by the pupils, both in language and penmanship.

Besides the manual dexterity gained by handling, measuring and putting together the materials and the knowledge of scientific facts and laws gained from the experiments and the study of the production of food stuffs, the pupils have been trained to be accurate in measurement, systematic in work, and neat, both in person and work, which are some of the essential requisites of a good home maker. To aid in accomplishing cleanliness and neatness pupils are requested to wear white aprons and sleeves when they come to a lesson, because, although these do not become soiled any sooner than dark calico or gingham ones, they show the dirt sooner, and when clean make the wearer feel and look more respectable. No pupil is allowed to take any part in the lesson without putting on her apron and sleeves, nor is she allowed to begin the washing of dishes until all materials are put away and the table and the dishes prepared for washing, or to begin the preparation of any dish with only a portion of the materials and utensils conveniently at hand.

NEEDS FOR ANOTHER YEAR.

I wish to call attention to the large classes, hence the crowded condition of the kitchen at the Wallach, where it is necessary to send 20 or 22 pupils to some of the classes. It is unwise to have so large a

number in a class, because of the difficulty of holding the attention and sustaining the interest of those who are not busy while guiding those who are. When there are so many in a class each one does not have sufficient opportunity to do the work of cook or dishwasher to gain the experience that will make her a successful worker in the home, as well as an intelligent one. The best results are obtained with classes in which there are from 10 to 14 pupils.

Another year it will be necessary to form some large classes at the Jefferson. To relieve these kitchens a new one should be established in each section, or one new one in such locality that pupils from both divisions may be accommodated. A school kitchen should also be established at Brookland, where there are pupils enough to make at least two classes, or one-half day's work. Although there is no available room in the building, one conveniently located can be rented for the purpose.

The kitchens at the Seaton and the Force will be relieved another year by the reestablishment of the kitchen at the Thomson, where it is proposed to try the group arrangement, which is done by dividing each class into three or four groups, letting each group work at a separate table, with quantities of materials as large or nearly as large as the single group now does. This was tried in one of the schools during the latter part of the year and found to be very satisfactory, enabling the teacher to hold the attention of each member of her class with less effort and to get through with less hurry as well as to give to each pupil more frequent opportunity to handle the materials. In all respects the work will be given as it now is, but the result will be four articles instead of one. Because of their nature some of the lessons will be given to the class as a single group—such lessons as broiling steak and roasting meat.

SELECTION OF TEACHERS.

The selection of the future teachers of cooking is a matter which deserves careful consideration, for not all of those who can cook are able to teach cooking, though all who teach cooking must have practical knowledge of how to cook. The first teachers in our schools were obtained from the normal school. To those who wished to teach in this department were given special instructions in cooking in addition to the regular work of the normal school. After the third year they were selected from candidates who had filed applications for positions as teachers of cooking and were able to give satisfactory testimony of their ability to cook. The last two teachers appointed have secured position by competitive examinations. With few exceptions those appointed have been well prepared to do the work and meet the requirements at the time of their respective appointments. Great praise is due them for the faithfulness and efficiency which they have shown in the work. To meet new demands on them from time to time,

which have been many because of the rapid growth of this science, they have read and studied that they might be able to do better work. But to-day, to be a successful teacher of cooking requires more thorough preparation than was required several years ago. In addition to a greater knowledge of the sciences and of language, some special preparation for teaching is expected. In many schools where teachers of cookery are trained the applicants are required to present certificates of graduation from high schools or pass examinations in high-school subjects. In others they are required to present certificates from normal schools or to possess teachers' certificates. To maintain the high standard of our own schools applicants for positions here should be able to pass an examination in physics, chemistry, and physiology; in the theory and practice of cooking, and be able to plan and give a lesson, as well as to speak and write good English. To do this requires at least two years' special study in some advanced school or college after leaving the high school.

The salaries we give are too small to retain teachers of the high qualifications demanded by our work. The salaries are less than those given to fourth-grade teachers. These teachers teach seventh and eighth grade girls and must maintain the high standard of work in English which is set for and secured in these grades. They teach cooking as an applied science. This requires a knowledge of chemistry, physics, physiology, and other sciences. They must be able to train these pupils in neatness, care, accuracy, and in all matters relating to this department of home making. The salaries should be increased to equal those of seventh-grade teachers at least, that we may be able to retain those whom we now have, who know how to give the work as we want it given and to secure those who are thoroughly prepared whenever there is need of new teachers. The initial salary might remain as it is at present, then after two years' satisfactory work be increased to the present maximum, after which it should be increased fifty dollars each year until the new maximum is reached, provided the service is satisfactory.

NIGHT SCHOOLS.

As in former years, two kitchens were opened for night work, in each of which there was an increase in the number of pupils enrolled, which shows that the grown people know of and appreciate the advantages which our schools offer. The large number who apply for admission, the great interest shown by members of the classes, and the great eagerness with which they seek help, make me believe other kitchens should be opened, that the advantages offered may be extended to a greater number of our young home makers, thereby securing for the future generations better cooked and more wholesome food; hence, stronger bodies and brains.

In closing this report I wish to thank you for the many words of encouragement and helpful suggestions which you have given, which have enabled us to carry on a work which has and is doing so much good in this community.

Respectfully submitted.

EMMA S. JACOBS,
Director of Cooking.

Mr. W. B. POWELL,
Superintendent of Schools.

SEWING SCHOOLS.

Mr. W. B. POWELL,
Superintendent of Public Schools.

DEAR SIR: I beg to submit the following report of the work of the sewing schools of the first eight divisions for the school year of 1897 and 1898.

The sewing classes in all the schools were started September 28, 1897, and continued until June 17, 1898, the first week of school being used by the teachers in the preparation and distribution of work.

No material changes were made during the year in the details of the work, the plan which has been outlined in former reports being adhered to.

Teachers' meetings were held monthly throughout the year, as heretofore.

EXTENSION OF THE WORK.

The past year has been one of progress in our work, an addition to the corps of one teacher having been made, thus permitting the establishment of an additional cutting and fitting school.

I regard this extension of our field as important, and hope to continue the growth of these schools until pupils in all sections of the District are provided with facilities for this special line of instruction.

The work in these classes is entirely practical, the results of which represent the fruition of the whole course in sewing.

When girls of the sixth grade—from twelve to fourteen years of age—are able, from measurements, to cut, baste and finish garments, the advantage of the sewing course becomes apparent to both pupil and parent and the training in this special line is understood and appreciated.

The new cutting and fitting school above referred to is located at the Dennison building, where all sixth-grade pupils of the first division are now able to take this advanced work. We also fitted up a class room for cutting and fitting at Brookland.

At least two additional schools for this work are still needed to accommodate the pupils of the city schools—one in the western part of the city, for pupils of the Grant and Weightman buildings and the new school at Twenty-fourth and F streets, and another on Capitol Hill, for pupils of the Peabody, Carbery, Maury, and Peabody Annex.

The establishment of these two schools, with the normal increase of new school buildings, will necessitate the appointment of two additional teachers.

As another result of the increase of our working force, we were able the past year to include the pupils of the Conduit Road school and those of the Hayes and Langdon schools in our classes. Heretofore these schools have not had the benefit of instruction in sewing.

Our plans for next year include the following new schools: Eckington, Peabody Annex, Chevy Chase, Toner at Twenty-fourth and F streets, and the Bruce school on Marshall street.

It has been our effort to keep the work upon practical lines and to utilize the time at our disposal in such manner as to secure useful rather than ornamental results. Thus the pupil's attention (after the necessary preliminary instruction in the formation of stitches, etc.) is directed to patching, darning, buttonhole making, drafting of patterns, and the cutting and making of simple garments in miniature.

The making of miniature garments (instead of full size) enables the pupils to secure the required training without devoting the time and and using material necessary to the completion of garments of full size.

As a result of this character of work even the younger pupils soon become so proficient as to be of service in the home. The cutting of waists and like garments is a logical outgrowth of the earlier training and constitutes a finishing step in the course, which is popular and successful.

QUALIFICATIONS OF TEACHERS.

While the present teachers of sewing are competent and are doing excellent work, I see no reason why applicants for these positions should not be subject to examination to test their fitness before appointment, as is the case with teachers in other lines of work. I refer to this matter, as it has been suggested to me by yourself.

It is essential that the sewing teacher should be intelligent, generally, and have at least a good common-school education in addition to a knowledge of the art of sewing. It is a common mistake to suppose that every seamstress is qualified for the schoolroom.

Correct syntax, spelling, and some tact for blackboard writing and illustrations are quite as necessary in our work as in that of the teacher of the ordinary school studies.

I therefore approve the suggestion that some preliminary test of fitness be required of applicants for positions as sewing teachers.

In conclusion I may say that the year's work was highly satisfactory and the progress made encouraging.

I take pleasure in commending the faithful work of the sewing teachers, all of whom have shown zeal and energy in their duties as well as the improvement and aptitude which result from added experience in the work.

I beg also to acknowledge the courteous cooperation and encouragement of yourself, the supervising principals, and the board of trustees during the year.

The following statement shows the number of pupils instructed and the division of work among the teachers.

Cutting and filling classes.

607 O street nw. (Isabelle Solomons, teacher. Pupils received from Henry, Polk, Twining, Seaton, and Webster):	
Number of pupils	293
Number of classes	15
Blair Annex, Eighth and I streets ne. (Amelia Dalton, teacher. Pupils received from Hayes, Blair, Madison, Taylor, Pierce, Carbery, and Peabody):	
Number of pupils	283
Number of classes	15
Seventh and G streets se. (Ernestine R. Thornton, teacher. Pupils received from Wallach, Towers, Lenox, Brent, Buchanan, and Tyler):	
Number of pupils	233
Number of classes	13
494 Maryland avenue sw. (Annie L. Norris, teacher. Pupils received from Jefferson, Amidon, Smallwood, Greenleaf, Bradley, and Arthur):	
Number of pupils	218
Number of classes	13
3104 P street (Sarah M. Davidson, teacher. Pupils received from Addison, Jackson, Fillmore, Corcoran, and Weightman):	
Number of pupils	147
Number of classes	9
Dennison School (Hannah Draney, teacher. Pupils received from Franklin, Force, Thomson, Adams, Berret, Dennison, and Harrison):	
Number of pupils	194
Number of classes	11
Total number of pupils in cutting and fitting classes	1,368
Total number of classes	76
Average number of pupils per class	18

Plain sewing.

Miss M. C. Henry taught in the Force, Berret, Dennison, Harrison, Phelps, and Seaton:	
Number of pupils	609
Number of classes	21
Mrs. C. L. Stanton taught in the Jackson, Fillmore, Addison, Corcoran, Birch, Blunt, High Street, Threlkeld, Tenley, and Conduit Road:	
Number of pupils	509
Number of classes	22
Miss Kate Graham taught in the Brent, Wallach, Lenox, McCormick, Amidon, Greenleaf, Smallwood, Bradley, and Potomac:	
Number of pupils	653
Number of classes	25
Miss A. M. Wells taught in the Arthur, Carbery, Maury, Wilson, Webster, Johnson, Monroe, and Woodbury:	
Number of pupils	675
Number of classes	25

Mrs. E. M. Colhoun taught in the Adams, Webster, Henry, Tyler, Cranch, Buchanan, and Grant Road:

Number of pupils	590
Number of classes	23

Miss Charlotte White taught in the Hayes, Blair, Taylor, Taylor Annex, Madison, Pierce, Pierce Annex, Jefferson, and Amidon:

Number of pupils	528
Number of classes	23

Miss Genevieve Cassin taught in the Grant, Weightman, Wallach, Van Buren Annex, Congress Heights, Good Hope, and Garfield:

Number of pupils	571
Number of classes	22

Mrs. F. P. Polkinhorn taught in the Blake, Gales, Hamilton, Langdon, Franklin, Mott, Thomson, Brightwood, and Military Road:

Number of pupils	616
Number of classes	21

Miss Caroline Dodson taught in the Benning, Benning Road, Twining, Morse, Van Buren, Hillsdale, and Birney:

Number of pupils	513
Number of classes	23

Mrs. S. M. Davidson taught in the Peabody and Carbery:

Number of pupils	251
Number of classes	9

Mrs. A. L. Norris taught in the Jefferson:

Number of pupils	85
Number of classes	4

Miss E. R. Thornton taught in the Towers:

Number of pupils	83
Number of classes	3

Miss Hannah Draney taught in the Brookland:

Number of pupils	54
Number of classes	3

Total number of pupils in "plain-sewing" classes	6,237
Total number of classes	224
Average number of pupils per class	27.84

Very respectfully,

MARGARET W. CATE.

SEPTEMBER 8, 1898.

SUPERINTENDENT COOK'S REPORT.

BRIEF SCHOOL DIRECTORY, 1898–99.

SUPERINTENDENT.

G. F. T. COOK, Sumner School.

CLERK.

J. W. F. SMITH, Sumner School.

DIRECTORS OF SPECIAL WORK.

Director of primary work .....Emma F. G. Merritt (Miss)....1109 I street nw.
Assistant director .....N. T. Jackson (Miss) .....318 M street sw.
Director of music.....A. S. Davis (Mrs.).....1320 T street nw.
Director of drawing .....T. W. Hunster.....1476 Kenesaw avenue.
Director of manual training.....James H. Hill.....227 Wilson street nw.
Director of cooking.....M. B. Cook (Miss).....215 Prince street, Alexandria, Va
Director of sewing .....C. E. Syphax (Miss).....1447 Pierce Place.
Director of physical culture .....H. B. George (Miss).....619 B street ne.

NORMAL AND HIGH SCHOOLS.

Name of building.	Location of building.	Name and residence of principal.
Normal School.....	Miner School, corner 17th and Madison streets nw.	Miss Lucy E. Moten, 728 4th street nw.
High School	M street between 1st street and New Jersey avenue nw.	Dr. W. S. Montgomery, 1912 11th street nw.

NINTH DIVISION.

Supervising principal, Mr. H. P. MONTGOMERY.

Office, Sumner School; residence, 1928 Eleventh street NW.

Sumner.....	17th and M streets nw	Miss M. E. Gibbs, 1741 20th street nw.
Stevens.....	21st street, between K and L streets nw.	Mr. J. B. Clark, 1726 8th street nw.
Magruder	M street, between 16th and 17th streets nw.	Miss A. M. Mason, 2218 I street nw.
Wormley	Prospect street, between 33d and 34th streets nw.	Miss A. T. Howard, 2209 14th street nw.
Briggs.....	22d and E streets nw	Mr. F. L. Cardozo, 1333 V street nw.
Garrison.....	12th street, between R and S streets nw.	Miss K. U. Alexander, 1512 Pierce place, nw.
Phillips.....	N street, between 27th and 28th streets nw.	Miss G. F. Smith, 1613 Madison street nw.

TENTH DIVISION.

Supervising principal, Dr. J. H. N. WARING.

Office, John F. Cook School; residence, Linden, Md.

Name of building.	Location of building.	Name and residence of principal.
John F. Cook	O street, between 4th and 5th streets nw	Miss Sara C. Lewis, 1120 19th street nw.
Garnet	U street, between Vermont avenue and 10th street nw.	Miss Lucinda Cook, 2224 6th street nw.
Banneker	3d street, between K and L streets nw	Mr. J. W. Cromwell, 1439 Pierce place nw.
Jones	1st and L streets nw	Miss K. C. Lewis, 1116 18th street nw.
Slater	P street, between North Capitol and 1st streets nw.	Miss E. A. Chase, 1109 I street nw.
Logan	3d and G streets ne	Mr. J. C. Nalle, 1429 Pierce place nw.
Patterson	Vermont avenue, near U street, nw	Miss C. A. Patterson, 1532 15th street nw.
Douglass	1st and Pierce streets nw	Miss H. A. Hebbron, 1137 24th street nw.

ELEVENTH DIVISION.

Supervising principal, Mr. E. W. BROWN.

Office, Lincoln School; residence, 924 Twenty-fourth street NW.

Lincoln	2d and C streets se	Miss M. P. Shadd, 2110 14th street nw.
Randall	1st and I streets sw	Miss M. E. Tucker, 413 B street se.
Giddings	G street, between 3d and 4th streets se.	Miss L. A. Smith, 903 U street nw.
Anthony Bowen	9th and E streets sw	Miss J. C. Grant, 1448 Pierce place nw.
Bell	1st street, between B and C streets sw.	Miss L. F. Dyson, 101 7th street se.
Ambush	L street, between 6th and 7th streets sw.	Miss A. S. Bailey, 421 8th street sw.
Payne	15th and C streets se	Miss R. J. Baldwin, 1234 4th street nw.
Lovejoy	12th and D streets ne	Mr. M. Grant Lucas, 1221 Linden street ne.

SUPERINTENDENT COOK'S REPORT.

WASHINGTON, D. C., *November 1, 1898.*

GENTLEMEN: I have the honor to present herewith the report of the schools of the ninth, tenth, and eleventh divisions of the public schools of the District of Columbia, which embrace all the public colored schools of the city, for the year ending June 30, 1898.

Statistics showing the classification of pupils embraced by the enrollment, the number of teachers employed and their classification, the cost of tuition, the cost of supervision, and other information are also presented in detail in tabulated statements.

ENROLLMENT.

Whole number of pupils enrolled	12,975
Average number of pupils enrolled	10,578
Average daily attendance	10,040
Per cent of attendance	94.9

The whole enrollment was distributed over grades as follows:

	Boys.	Girls.	Total.
Normal School	13	43	56
High School	220	470	690
Total	233	513	746
Grammar schools:			
Eighth grade	248	305	553
Seventh grade	322	395	717
Sixth grade	422	517	939
Fifth grade	574	703	1,277
Total	1,566	1,920	3,486
Primary schools:			
Fourth grade	737	903	1,640
Third grade	828	1,016	1,844
Second grade	1,004	1,231	2,235
First grade	1,359	1,665	3,024
Total	3,928	4,815	8,743
Grand total	5,727	7,248	12,975

The per cent of the whole enrollment in the different grades is shown in the following table:

Schools.	Per cent.
In Normal School	0.43
In High School	5.32
In grammar schools	26.87
In primary schools	67.38
Total	100.00

SCHOOLS.

	Division.			Normal and High schools.	Total.
	Ninth.	Tenth.	Eleventh.		
Normal School				1	1
High School				1	1
Total				2	2
Grammar schools:					
Eighth grade	4	5	3		12
Seventh grade	7	6	4		17
Sixth grade	9	7	4		20
Fifth grade	9	8	8		25
Total	29	26	19		74
Primary schools:					
Fourth grade	11	11	11		33
Third grade	*a* 14	11	13		38
Second grade	*a* 15	16	15		46
First grade	*a* 20	20	22		62
Total	60	58	61		179
Grand total	89	84	80	2	255

a Three under instruction of assistant teachers in the Normal School.

TEACHERS.

The whole number of teachers employed was 318, of whom 272 were female and 46 male. They were employed as follows:

Supervising principals	3
Normal School	6
High School	27
Grammar schools:	
Eighth grade	12
Seventh grade	17
Sixth grade	20
Fifth grade	25
Primary schools:	
Fourth grade	33
Third grade	35
Second grade	43
First grade	59
Teachers of music	4
Teachers of drawing	6
Teachers of carpentry	6

Teachers of metal working	2
Teachers of cookery	5
Teachers of sewing	9
Teachers of physical culture	4
Director of primary work	1
Assistant director of primary work	1
Total	318

Teachers, graduates of the Washington High and Normal schools	193
Teachers, graduates of the Washington Normal School only	15
Teachers, graduates of other normal schools	21
Teachers, graduates of high schools only	26
Teachers, graduates of colleges	27
Teachers, graduates of colleges and normal schools	3
Teachers, not graduates of any of the above courses	40
Total	325
Teachers counted in more than one course	7
Total	318

The day schools cost—

For teachers and supervisors, including office force	$210,152.75
For janitors	16,070.00
For rent	3,936.00
For fuel	10,636.49
For incidental expenses, including insurance, general supplies, printing, flags, etc	8,343.30
For free text-books and supplies	9,956.98
For industrial instruction, including manual training, cooking, and sewing	2,466.00
For repairs to buildings	9,590.00
Total	271,151.52

There were enrolled in the night schools 1,395 persons. They were taught by 25 teachers, of whom 4 were male and 21 female.

The night schools cost—

For teachers	$2,097.00
For incidental expenses	133.65
Total	2,230.65

The day schools were in session 183 days; the night schools were open 42 nights.

The cost of schools for supervision and teaching—

Superintendent	$2,250.00
Clerk	800.00
Messenger	200.00
Supervising principals, 2 at $2,000 each	4,000.00
Supervising principal, 1 at $1,800	1,800.00
One director of primary work	990.00
One assistant director of primary work	585.00
Total	10,625.00
Cost per pupil (estimated on the average enrollment, 10,578)	1.00

Tuition.

Normal School:	
Principal	$1,500.00
One teacher	1,000.00
Two teachers	1,600.00
One teacher	700.00
One teacher	650.00
Total	*5,450.00
Cost per pupil (estimated on the average enrollment, 55)	14.54
High School:	
Principal	2,000.00
Twenty-six teachers	21,710.00
Total	23,710.00
Cost per pupil (estimated on the average enrollment, 593)	39.98
Grammar schools (12 eighth, 17 seventh, 20 sixth, 25 fifth grade schools)	59,343.71
Cost per pupil (estimated on the average enrollment, 2,834)	20.93
Primary schools (33 fourth, 38 third, 46 second, 62 first grade schools)	†87,339.69
Cost per pupil (estimated on the average enrollment, 7,096)	12.96
Special teachers (4 music teachers, 6 drawing teachers, 4 physical-culture teachers)	9,975.00
Cost per pupil (estimated on the average enrollment, 10,578)	.94
Teachers of manual training (carpentry, 6; metal working, 2; cookery, 5; sewing, 9	13,709.35
Cost per pupil (estimated on the average enrollment, 10,578)	1.29
Average cost per pupil for tuition in all schools (based on the average enrollment, 10,578)	18.86
Summary:	
Total cost of instruction, including supervision	210,152.75
Whole number of pupils enrolled	12,975
Average number of pupils enrolled	10,578
Average daily attendance	10,040
Average cost of instruction, including supervision, estimated on—	
1. Whole enrollment	16.19
2. Average enrollment	19.86
3. Average daily attendance	20.93

Janitors.

Total amount expended	16,070.00

Contingent expenses.

Total amount expended	8,069.30
Average cost per pupil (estimated on average enrollment)	.76

Free text-books.

Total amount expended	9,956.98
Average amount per pupil (estimated on average enrollment)	1.00

Industrial instruction.

Total amount expended	2,466.00

Fuel.

Total amount expended	10,636.49

*Including the cost of teaching 9 practice schools, $4,650.

†To be increased by the cost of teaching 9 practice schools, $4,650.

Rent.

Total amount expended	$3,936.00

Flags.

Total amount expended	274.00

SUMMARY.

Amount expended, grand total	261,561.52
Average cost per pupil (including high and normal schools) for all expenses except repairs and permanent improvements:	
1. On whole enrollment	20.15
2. On average enrollment	24.72
3. On average daily attendance	26.05

The following embrace, among other statistics, the average salary per teacher for the Normal School, High School, grammar and primary schools, and special instruction, the number and cost of free text-books and supplies, etc.:

Normal School.

Number of teachers trained	56
Average attendance	55
Number of teachers employed	6
Average salary	$908.33

High School.

Number of pupils enrolled	690
Average enrollment	593
Average attendance	567
Per cent of attendance	95.5
Average number of tardinesses per month	45.6
Number of pupils dismissed	0
Number of teachers employed	27
Average salary paid	$878.14
Cost of tuition per pupil (estimated on the average enrollment)	$39.98

Grammar and primary schools.

Number of pupils enrolled	12,229
Average enrollment	9,930
Average attendance	9,418
Per cent of attendance	94.8
Average number of tardinesses per month	457.9
Number of pupils dismissed	0
Number of cases of corporal punishment	28
Number of teachers employed	244
Average salary paid	$601.20
Average number of pupils to the teacher (estimated on the average enrollment)	40.6
Cost of tuition per pupil (estimated on the average enrollment)	$14.77

Special teachers.

Drawing	6
Music	4
Teachers of physical culture	4

Average salary paid:	
Drawing	$662.50
Music	$837.50
Teachers of physical culture	$662.50
Average cost per pupil for special tuition (estimated on the average enrollment)	$0.94

Teachers of industrial instruction.

Manual training (carpentry and metal work)	8
Cooking	5
Sewing	9
Average salary paid:	
Manual training	$765.62
Cooking	$578.00
Sewing	$521.59
Average cost per pupil for industrial instruction (estimated on the average enrollment)	$1.29

Free text-books and supplies.

	Quantity.	Cost.		Quantity.	Cost.
BOOKS.			BOOKS—continued.		
Æsop's Fables	62	$16.47	Legend of Sleepy Hollow	117	$4.09
Africa, Part I	3	.75	Miles Standish	95	11.40
Africa, Part II	3	.75	Modern Europe	6	1.50
Algebras, Wentworth	92	87.63	Music readers:		
Arithmetic:			Second, Mason	237	80.24
Intellectual	339	70.34	Third, Mason	277	94.18
Cook and Cropsey	137	83.91	Normal First	22	5.99
Standard, Milne	276	148.11	Normal Second, Part II	82	25.15
Elements of, Milne	465	114.99	Normal Third	120	61.20
Arithmetic readers:			Music pamphlets	22	2.64
No. 1	283	49.70	Old Greek Stories	130	48.64
No. 2	245	53.49	Our American Neighbors	6	1.50
Civil Government, Fiske	50	4.00	Our Continent, Shaler	83	47.08
Child's Health Primer	29	5.18	Our Own Country	6	1.50
Dictionaries, Comprehensive	25	23.75	Readers:		
Essentials of Health, Stowell	71	50.76	Primer and First, Franklin	376	77.08
Evangeline	79	9.55	Second, Franklin	490	149.86
Geographies:			Third, Franklin	295	125.37
Elementary, Redway	724	346.92	Fourth, Franklin	200	102.00
Complete, Frye	397	406.60	Intermediate, Franklin	72	36.72
Geologies, Shaler	75	6.37	Fifth, Franklin	60	42.90
Government and Administration, United States	116	68.60	Primer, Normal	1,099	169.26
Grammar, Kerl	225	134.62	First Normal	1,155	236.77
Hans Andersen Stories	116	34.61	Second Normal	1,166	357.57
Histories:			Third Normal	558	228.31
Barnes	173	143.88	Fourth Normal	692	$352.92
Eggleston	135	117.56	Fifth Normal	151	107.96
Fiske	29	23.20	Snow Bound	27	3.24
Johnston	324	283.50	War of Independence	6	2.00
Montgomery	99	84.15	Word Analysis	99	13.76
Ridpath	100	66.50	Word and Sentence Book, Merrill	846	185.41
Shaler, sets	2	15.00	Total		5,081.49
Hygiene for Young People	131	54.36			

Free text-books and supplies—Continued.

	Quantity.	Cost.
SUPPLIES.		
Bean bags	80	$4.00
Blackboard rubbers	1,108	35.09
Blackboard pointers	78	11.37
Block tablets	6,300	189.00
Brushes	288	4.32
Cardboard ....sheets	4,140	46.57
Chalk ....gross	1,174	64.57
Compassess	720	90.00
Drawing tablets	10,376	152.32
Dumb-bells ....pairs	50	10.50
Dumb-bell hooks	50	4.50
Envelopes	7,440	37.20
Glue ....cans	134	34.84
Ink ....quarts	920	138.00
Paint, No. 2 ....boxes	1,296	168.48
Paper:		
Color—		
Extra ....packs	223	26.76
Do ....do	676	157.73
Composition—		
No. 1 ....packs	4,132	289.24
No. 2 ....do	4,700	329.00
No. 3 ....do	4,850	339.50
Drawing ....reams	428	192.60
Examination ....do	659	527.20
Practice ....packs	13,950	711.45
Wrapping ....reams	5	15.00
SUPPLIES—continued.		
Pencils:		
W. P. S. ....gross	373	$292.80
Drawing ....do	98	102.90
Compass ....dozen	43	12.90
Penholders ....gross	47	28.20
Pens ....do	1,047	439.74
Rubbers, diamond	1,760	15.40
Rulers, brass edge	380	14.25
Rulers, plain edge	716	17.90
Squares	228	12.16
Wands	20	1.04
Twine ....balls	6	.36
Total		4,515.89
ADDITIONAL EXPENSES.		
Blank books and printing		19.14
Hauling and labor		93.29
Freight		.16
Proportionate part of salary of custodian		246.60
Stamp pad and ink		.41
Total		359.60
Grand total		9,956.98

TABLE I.—*Showing the more essential statistics of the night schools for every year since appropriation was first made for this instruction.*

Year.	Whole enrollment.	Average enrollment.	Average attendance.	Per cent of attendance.	Time.		Number of school buildings used for night schools.	Number of teachers.	Entire cost of teaching.
					Number of nights.	Number of hours.			
1885–86	.....	.....	232	.....	37	74	1	8	(a)
1886–87	.....	467	378	80.9	52	104	3	12	$1,248.00
1887–88	1,053	738	650	88	51	102	5	20	2,295.00
1888–89	1,080	703	619	88	57.5	115	5	20	2,300.00
1889–90	1,158	744	644	86.5	55	110	5	20	2,200.00
1890–91	1,395	846	700	82.7	56	112	6	24	2,699.98
1891–92	1,353	855	731	85.4	48	96	6	24	2,320.00
1892–93	1,315	896	779	86.8	47	94	6	27	2,501.50
1893–94	1,365	921	792	85.9	47	94	6	27	2,520.50
1894–95	1,342	840	723	86	47	94	6	27	2,498.00
1895–96	1,508	973	851	87.4	48	96	7	27	2,500.00
1896–97	1,420	946	801	84.4	45	90	6	26	2,299.00
1897–98	1,395	921	808	87.7	42	84	6	25	2,097.00

a Expense borne partly by the District of Columbia and partly by an association of ladies who were active in their efforts to have the night schools established.

TABLE II.—*Showing the average number of pupils to the school of grades below the High School, based on the whole and the average enrollment.*

Grade.	Schools.	Whole enrollment.	Average to the school. *a*	Average enrollment.	Average to the school. *b*
Eighth	12	553	46	451	37.5
Seventh	17	717	42.1	584	34.3
Sixth	20	939	46.9	763	38.1
Fifth	25	1,277	51	1,036	41.4
Fourth	33	1,640	49.6	1,331	40.3
Third	38	1,844	48.5	1,496	39.3
Second	46	2,235	48.5	1,814	39.4
First	62	3,024	48.7	2,455	39.5
Total	253	12,229	48.3	9,930	39.3

a Based on the whole enrollment. *b* Based on the average enrollment.

TABLE III.—*Showing the whole number enrolled in each grade and per cent of enrollment for the school years 1896-97 and 1897-98, with increase and decrease.*

Grade.	1897-98.		1896-97.		Increase.	Decrease.
	Whole enrollment.	Per cent.	Whole enrollment.	Per cent.		
Normal School	56	0.43	30	0.23	26	.....
High School	690	5.32	736	5.73	.....	46
Eighth	553	4.26	510	3.97	43	.....
Seventh	717	5.53	737	5.73	.....	20
Sixth	939	7.24	888	6.91	51	.....
Fifth	1,277	9.84	1,222	9.51	55	.....
Fourth	1,640	12.63	1,658	12.90	.....	18
Third	1,844	14.21	1,954	15.20	.....	110
Second	2,235	17.23	2,308	17.95	.....	73
First	3,024	23.31	2,811	21.87	213	.....
Total	12,975	100	12,854	100	388	267
Summary.						
Normal and High schools	746	5.75	766	5.96	26	46
Grammar schools	3,486	26.87	3,357	26.12	149	20
Primary schools	8,743	67.38	8,731	67.92	213	201
Total	12,975	100	12,854	100	388	267

TABLE IV.—*Showing the number of schools of each grade below the High School.*

Division.	Grade.								Total.
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	
Ninth	20	15	14	11	9	9	7	4	89
Tenth	20	16	11	11	8	7	6	5	84
Eleventh	22	15	13	11	8	4	4	3	80
Total	62	46	38	33	25	20	17	12	253

TABLE V.—*Showing the absolute and relative growth of the High School.*

Year.	Number enrolled in all grades, excluding Normal School.	Number enrolled in the High School.	Per cent of enrollment in all grades, excluding Normal School.	Teachers in all grades, excluding Normal School teachers.	Teachers in High School.	Per cent of teachers in High School on number of teachers in all grades, excluding those in Normal School.	Number of graduates from High School.
1885-86	10,138	247	2.4	174	6	3.4	33
1886-87	10,345	276	2.7	182	8	4.4	39
1887-88	11,000	361	3.3	188	9	4.8	51
1888-89	11,130	416	3.7	197	11	5.5	67
1889-90	11,398	345	3	211	12	5.6	41
1890-91	12,106	376	3.1	226	14	6.1	86
1891-92	12,253	407	3.3	240	17	7	69
1892-93	12,303	444	3.6	254	18	7	90
1893-94	12,207	460	3.7	268	19	7	99
1894-95	12,453	618	4.9	281	22	7.8	131
1895-96	12,846	675	5.2	292	24	8.2	49
1896-97	12,824	736	5.7	303	26	8.5	79
1897-98	12,919	690	5.3	312	27	8.6	103

TABLE VI.—*Showing the number of schools of each grade two of which occupy one room.*

Division.	Grade.			Total.
	First.	Second.	Third.	
Ninth	16	13	1	30
Tenth	20	16	4	40
Eleventh	15	9	2	26
Total	51	38	7	96

TABLE VII.—*Showing the number of school buildings and schoolrooms owned and rented.*

Years.	Buildings.			Rooms.			Years.	Buildings.			Rooms.		
	Owned.	Rented.	Total.	Owned.	Rented.	Total.		Owned.	Rented.	Total.	Owned.	Rented.	Total.
1884-85	10	2	12	95	15	110	1891-92	21	3	24	186	21	247
1885-86	12	4	*a*16	114	17	131	1892-93	21	2	23	198	10	206
1886-87	11	4	15	112	17	129	1893-94	22	2	24	206	10	216
1887-88	13	9	22	129	28	157	1894-95	22	2	24	206	10	216
1888-89	13	8	21	129	27	156	1895-96	22	3	25	212	22	234
1889-90	18	4	22	156	21	177	1896-97	24	3	27	224	17	241
1890-91	18	4	*b*23	166	22	190	1897-98	24	3	27	*c*226	*d*20	246

a Building owned by first six divisions given up at end of the school year.
b Including one 2-room building (free of rent to the District of Columbia) given up at the end of the school year.
c Two used for normal, nineteen for high, two for supervising principals' offices, seven for industrial schools.
d Eleven rooms for industrial schools.

Number of grammar and primary schools, 253.

TABLE VIII.—*Showing growth of the schools during the last thirty-one years.*

Year.	Number of schools.	Number of teachers.	Number of pupils.	Year.	Number of schools.	Number of teachers.	Number of pupils.
1867-68	41	41	2,300	1883-84	140	154	9,181
1868-69	52	52	3,000	1884-85	149	162	9,614
1869-70	66	63	3,650	1885-86	161	174	10,158
1870-71	68	66	4,986	1886-87	168	182	10,365
1871-72	75	78	4,661	1887-88	176	191	11,040
1872-73	76	86	5,188	1888-89	186	202	11,170
1873-74	74	87	5,280	1889-90	197	216	11,438
1874-75	75	89	5,489	1890-91	214	230	12,132
1875-76	76	90	5,454	1891-92	224	244	12,280
1876-77	79	92	5,954	1892-93	229	258	12,329
1877-78	96	109	6,515	1893-94	236	272	12,233
1878-79	108	119	7,731	1894-95	246	286	12,479
1879-80	117	130	8,080	1895-96	253	297	12,876
1880-81	121	134	8,164	1896-97	255	308	12,854
1881-82	130	143	8,303	1897-98	270	318	12,975
1882-83	135	147	8,735				

TABLE IX.—*Showing whole enrollment of pupils in each grade, by sexes, for the school year ending June 30, 1898.*

Grade.	Whole enrollment.			
	Boys.	Girls.	Total.	Per cent.
Normal School	13	43	56	0.43
High School	220	470	690	5.32
Eighth	248	305	553	4.26
Seventh	322	395	717	5.53
Sixth	422	517	939	7.24
Fifth	574	703	1,277	9.84
Fourth	737	903	1,640	12.63
Third	828	1,016	1,844	14.21
Second	1,004	1,231	2,235	17.23
First	1,359	1,665	3,024	23.31
Total	5,727	7,248	12,975	100
SUMMARY.				
Normal and High schools	233	513	746	5.75
Grammar schools	1,566	1,920	3,486	26.87
Primary schools	3,928	4,815	8,743	67.38
Total	5,727	7,248	12,975	100

The following is a list of the owned and rented school buildings, giving the year of erection and names of those after whom named:

Schools.	Erected.	For whom named.
OWNED.		
Ambush	1889	Enoch Ambush.
Anthony Bowen	a 1867	Anthony Bowen.
Banneker	1882	Benjamin Banneker.
Bell	1889	George Bell.
Briggs	1889	Martha B. Briggs.
Cook	b 1868	John F. Cook, sr.
Douglass	1896	Frederick Douglass.
Garnet	1880	Henry Highland Garnet.
Garrison	1889	William Lloyd Garrison.
Giddings	1887	Joshua R. Giddings.
High School	1890	
Jones	1889	Alfred Jones.
Lincoln	1871	Abraham Lincoln.
Logan	1891	John A. Logan.
Lovejoy	1872	Elijah P. Lovejoy.
Magruder	1887	J. B. Magruder.
Patterson	1893	James W. Patterson.
Payne	1896	Daniel A. Payne.
Phillips	1890	Wendell Phillips.
Randall	1876	Eliza G. Randall.
Slater	1890	John F. Slater.
Stevens	c 1868	Thaddeus Stevens.
Sumner	1871	Charles Sumner.
Wormley	1884	James Wormley
RENTED.		
Miller	1866	
Miner	1877	Myrtilla Miner.
917 P street NW	1876	Location.

a Reerected in 1897. b Reerected in 1877. c Reerected in 1896.

ATTENDANCE AND SCHOOL POPULATION.

The whole number of pupils enrolled during the year was 12,975. The average number of pupils enrolled was 10,578. The average number of pupils in daily attendance was 10,040. The entire nrollment was 121, the average enrollment 158, and the average daily attendance 137 more than in the previous school year. The relatively larger increase in the average enrollment and average daily attendance than in the entire enrollment indicates improved condition in the degree of permanent attendance and permits larger opportunity for availment of school benefits.

For effective school work permanence in attendance is an essential factor. In these schools there are very many whose attendance is too limited for the attainment of appreciable result. This fact is well

evinced in the changes shown in the enrollment of pupils from month to month. As these large fluctuations are of annual recurrence, varying in degree with the varying circumstances in life, they present matter for consideration as to the ways and means by which the pupils of this class will suffer least loss of school opportunity. They vary in their attendance from that of a few days to that of a large portion of the school year. On their return to school, either in the current or in a subsequent year, the loss of opportunity in the interval is often so great as to forbid in the graded school that classification which their degree of attainment suggests. Their reassignment to the grade in its more advanced stage encourages, in the want of due preparation, poor scholarship; their assignment to the lower grade begets, in the required repetition of much grade work, listlessness and discouragement, which often result in permanent withdrawal from the schools.

The one-year grade does not conduce to the interests of this class of pupils. Its division into two or more grades would, in the short interval from grade to grade, in the less distance between classes, afford larger opportunity for attainment. Through such means the time lost, usually through adverse circumstances in life, would not be supplemented by that now imposed by the longer interval in grading. In the absence of shorter grades these pupils might receive material benefit by the establishment of schools of ungraded character, whose distinctive feature would be to prepare them for the graded school. Such schools should have a less number of pupils to the teacher than the graded schools, that ample opportunity may be afforded for individual instruction. Such provision would be conducive to proper training, through connected pursuit of study, economy of time, and longer retention in school.

The gravity of this question may be better seen in the consideration of the fact that the average length of time spent in school by the masses is about five years, time not sufficient to cover much more than one-half of the course of instruction prescribed for the elementary schools. Compulsory legislation may increase the number of attendants, but it can not increase the length of school attendance. The length is determined by the inexorable law of necessity which, in the struggle to sustain life through its vicissitudes, pushes aside civil enactment or law. What should be done, or what can best be done with due regard to general interest, to give to the individual whose circumstances in life forbid steady or lengthened attendance the largest opportunity for attainment possible in his limited time, is a problem whose successful solution will add much to his welfare and that of the community.

The following table, in which the number of pupils on the rolls the last day of each month of the school year in each division is shown, permits a view of the monthly fluctuations in attendance:

Pupils on the rolls the last day of each month.

[Normal School not included in this table.]

Month.	Total, 1896–97.	High School.	Division.			Total, 1897–98.
			Ninth.	Tenth.	Eleventh.	
September	10,715	662	3,506	3,735	3,110	11,013
October	11,035	649	3,592	3,794	3,113	11,148
November	11,049	638	3,586	3,750	3,201	11,175
December	10,542	607	3,494	3,372	3,303	10,776
January	10,216	597	3,490	3,365	3,294	10,746
February	10,241	589	3,414	3,352	3,214	10,569
March	10,126	577	3,325	3,235	3,123	10,260
April	9,891	557	3,216	3,113	3,012	9,898
May	9,550	558	3,109	3,017	2,932	9,616
June	9,405	542	3,038	2,988	2,888	9,456

To one knowing the condition of very many of this school population it is not difficult to see the cause of the large monthly withdrawals. In support of this statement an inspection of the above figures will show that the largest withdrawals are made during the inclement period of the year, the period in which there is least opportunity for permanent employment, from which to secure means to keep children in school.

The aim of the public school is not attained so long as it fails to enroll in it all of the school population whose instruction is not otherwise provided for. To what extent this aim was attained during the last school year may be shown by a comparison of the entire school population and the number of its enrollment in the schools. Eighteen thousand, in round numbers, is, it is believed, a fair estimate of the school population in these three divisions. The whole number of pupils enrolled in the schools last year was 12,975, which is the largest annual enrollment in their history. The difference between the number of the school population and that of the enrollment is 5,025. This number shows the number of the school population not enrolled in the public schools. The extent to which these nonattendants upon the public-school system is provided for by parochial and private school instruction is very limited, not exceeding a few hundred, as ascertained by inquiry. The private-school instruction among this population is almost too inconsiderable for mention, and there is large reason for it to be found in the degree of poverty that does not permit it. It then appears that almost 28 per cent of this school population is without the pale of school instruction.

The gathering of this large number of children, or any considerable portion of it, into the schools can not be effected without the appropriation of the means sufficient for their accommodation and instruction.

The present provision is already overtaxed. This may suggest the advisability of compulsory measures, resort to which in many instances I have no doubt would be absolutely necessary. The readiness of voluntary acceptance of the degree of provision already offered by the public schools, so well evidenced in the past, indicates that very much of the nonattendance of the school population is now due to circumstances in life which, in the want of means, forbid proper personal condition for the schoolroom. There is also reason to believe that there are others who would attend if ampler and more accessible provision were offered. The necessity now existing which, from the want of proper accommodation, overcrowds the schoolroom and reduces the session of school to fewer hours than have been prescribed for the due completion of grade work under conditions preservative of the comfort and health of pupils can not exist without adverse effect upon the enrollment of others of the school population and upon the maintenance of permanency in the attendance of those enrolled.

As the first aim of the public school should be to embrace all for whose benefit it is established, and as in the accomplishment of this aim there is offered the largest opportunity for the attainment of good, both to the individual and to the collection of individuals in society and state, there is no subject demanding graver and more serious consideration.

The following table shows the whole number of pupils enrolled, the average number enrolled, the average number in daily attendance, each with the percentage of increase from year to year, and the percentage of attendance based on the average enrollment, during the last thirteen years:

[Normal School not included in this table.]

Year.	Whole number enrolled.	Percentage of increase.	Average number enrolled.	Percentage of increase.	Average daily attendance.	Percentage of increase.	Percentage of attendance.
1885-86	10,138	5.62	8,191	6.52	7,756	6.43	94.6
1886-87	10,345	2.04	8,448	3.13	7,956	2.57	94.2
1887-88	11,000	6.33	8,754	3.62	8,266	3.89	94.4
1888-89	11,130	1.18	9,049	3.36	8,549	3.42	94.5
1889-90	11,398	2.40	9,250	2.22	8,728	2.09	94.3
1890-91	12,106	6.21	9,679	4.63	9,140	4.72	94.4
1891-92	12,253	1.21	9,915	2.44	9,363	2.43	94.4
1892-93	12,303	.40	10,072	1.55	9,535	1.80	94.6
1893-94	12,207	.....	10,116	.43	9,627	.95	95.1
1894-95	12,453	1.97	10,021	.....	9,457	.....	94.3
1895-96	12,846	3.05	10,266	2.38	9,738	2.88	94.8
1896-97	12,824	.....	10,391	1.20	9,874	1.37	95
1897-98	12,919	.73	10,523	1.25	9,985	1.15	94.8

The percentage of attendance, based on the average enrollment, for the entire period embraced is of the most gratifying character, and it has not materially varied in any one of the years, the highest being 95.1 and the lowest 94.2. During the last year the number of schools having a per cent of attendance equal to and above the average was 143. This uniformly high degree of regularity in attendance attests the apprecia-

tion of parents and pupils and contributes a large factor to successful result.

Not less favorable to school progress than the regular attendance, as indicated by the per cent of attendance, is that of prompt or punctual attendance as indicated by the degree of tardiness. The cases of tardiness for the year were 5,543, or 52 for every 100 pupils of the average number enrolled. This training in insuring larger opportunity for the accomplishment of its work is of inestimable value, not only upon such school life, but also in its promise to the avocations of after life. The degree of habituation attained is well exemplified in the fact that in no year during a period of thirteen years has the number of cases to the 100 pupils exceeded 52.

KINDERGARTENS.

There are in these divisions those of tender and more susceptible years than those embraced by the public school provision, whose systematic training under intelligent, appreciative, and cultured direction will not only insure to their lives proper moral and intellectual bent, but will also greatly facilitate and intensify aim and effort in all future school pursuit. These are found in the thousands of children of five and four years of age, and more thousands if yet more tender years present fit subjects for public school effort. No other school population can present greater need of nor a riper field for this early training. Almost helplessly weighted with centuries of unfavorable condition in the past, and with present environment largely inimical to proper moral and intellectual growth, many of the homes are incapacitated to give to these tender years that care and training which insure bent to noble and useful manhood and womanhood.

There is much due to private and society effort to supply this need, effort extending down to the year of public provision. Though it was insufficient in the extent of its embrace, and possibly, without detracting from the good that it has done and from the spirit actuating it, not in all its appointments fully equal to the accomplishment of what such training is capable, it did much in directing the attention of Congress to this great need and toward securing the public provision made at its last session. This public provision, though small, is large in significance, in the hope of larger provision it permits for the future.

While it is true that, in proportion to the numbers embraced by the instruction of one teacher, the kindergarten calls for a larger expenditure of money than the primary school, yet it is equally true that in the compensation it makes in the fuller preparation for after pursuit and in the trend to fuller development of mental and moral power there is large balance in its favor. As stated in a former report—

Due educational provision for this large class of children should not, rightly and judiciously considered, be a mere question of financial means, but in its relation to good government also one of polity, for in the molding of character as character forms this training is of inestimable value, not more to the one trained than to the welfare of the community of which he is a unit.

ACCOMMODATION.

The accomodation of the schools of these divisions is provided for in 27 buildings, of which 24 are owned and 3 rented. The owned buildings are used by the graded schools and the high school. The rented buildings furnish accommodation to the normal school, with its practice schools, and to manual training and cooking schools.

The period within which the owned buildings have been constructed extends from 1871 to 1898, inclusive. The stage in the period in which the erection was made naturally indicates the degree of completeness for school purposes. It may be said, however, that in adaptation of construction to purpose and in facilities for the attainment of that purpose, though varying in degree from the growth permitted by time and experience, they, as a rule, reflect credit upon the local government.

The most of these buildings, excepting the need of renovation through paint and kalsomine and ordinary repairs from wear and tear consequent upon time, are in good condition. There are, however, a few, and naturally of earliest construction, with defects sufficiently grave to demand earliest attention. Among this class are the Sumner and the Lincoln, erected in 1871. In both of these buildings the ventilation is very poor. Their basement floors are laid upon the bare earth, thus affording full opportunity for the escape of soil gas, which, with that from decaying wood, adds to the greatly vitiated-air conditions of the schoolroom resulting from the imperfect means of ventilation. As this condition is a constant and serious menace to the health of the hundreds almost daily assembled during the school year, it can not, with view to remedy, receive too early attention. These basement floors should be removed and, with proper substrata, relaid. The most of the other rooms of these buildings need reflooring, as from the wear and tear of more than a quarter century they have become rough and splintery and, in instances, too thin for the firm and secure setting of pupils' desks and chairs.

The Randall, another building of the early period, is objectionable in its stairways, which are so dangerous as to offer injury to life and limb in event of panic or fire. Their reconstruction in such way as to insure the safe exit of pupils under all circumstances should not be delayed.

The sites upon which these buildings have been erected have, in the main, been well selected, either with regard to the degree of accessibility to the school population, or to health conditions dependent upon the soil upon which located, or to the influences from the character of the environment. It can not be too strongly felt that the selection of a school site involves great responsibility, in the physical conditions essential to health and in the moral influences possible from surroundings.

The rented buildings, with the exception of the Miner, are, in nearly every essential to good condition, objectionable. The only justification for their retention lies in the inability to get others better suited in point

of location and purpose for which used. The Miner in its construction is excellently adapted to school purposes. It is, however, very much in need of extensive repairs, and particularly in improved plumbing, sewerage, and ampler closet facilities.

The buildings used by the graded schools present in the aggregate 205 schoolrooms, among which are three basement rooms which have the usual bad conditions of the basement room from heating by stoves, ventilating by windows, and from poor and insufficient light; and three rooms under a Mansard roof, with its peculiar contour, with low ceilings, ill ventilation, and poor and insufficient light from deep-set windows.

These 205 rooms are made to accommodate 253 schools, of which 96 are accommodated by 48 rooms. In each of these 48 rooms are two schools, one in the forenoon and the other in the afternoon, with an interval of not more than thirty minutes between the dismissal of the forenoon and the assembling of the afternoon school. Here is presented each school day during the school year an unsanitary condition whose ill effect upon the mental condition of the pupils can not be questioned.

It is apparent that there is large need of additional accommodation for this school population, not only to secure a larger enrollment of it in the schools, but also to afford adequate and proper facilities to many of the present enrollment.

For the immediate relief of the present enrollment in the schools, irrespective of accommodation to meet the annual increase and the needs of others not yet enrolled, three eight-room buildings and sites, one in each of the three divisions, are sorely needed.

The first building should be located in the ninth division, and at some point west of the Briggs School, in which all grades of school below the fourth grade have only half-day use of the schoolroom, and in which reduced hours for the fourth and fifth grades were prevented by transferring the fifth to the Stevens School, with loss of pupils on account of the distance imposed.

The second building should be located in the tenth division, at some point affording easy transfer of schools from the Cook, Banneker, Jones, and Slater buildings, in all of which all grades below the fourth have only half-day use of the room, and in the two latter even the fourth grades have the reduced hours.

The third building should be located in the eleventh division, and southeast of the Randall School, in which all grades below the fifth have only half-day use of the room, and from which three schools have been transferred to the Ambush and Bell buildings to maintain the fifth and sixth grade schools in the Randall with a whole-day session. There is no building in South Washington in which there is whole-day occupancy of the schoolroom below the fourth grade.

As even in the shortest time in which an appropriation can be made and become available sufficient time will have elapsed to aggravate greatly these existing conditions, this need is shown to be most urgent.

SCHOOLS AND SCHOOL WORK.

The number of schools during the year was 255. The number of each grade was as follows: First grade, 62; second grade, 46; third grade, 38; fourth grade, 33; fifth grade, 25; sixth grade, 20; seventh grade, 17; eighth grade, 12; high school, 1; normal school, 1. The number of graded schools in excess of that of schoolrooms was 48.

This condition made it necessary to have two schools occupy one room, one in the forenoon and the other in the afternoon, to the extent of the excess of schools. The number of schools having this half-day occupancy of the room was 96. The grades of schools thus circumstanced and the number of each grade were as follows: First grade, 51; second grade, 38; and third grade, 7.

As three and a half hours daily are prescribed by the course of instruction for first-grade schools, there is no time lost to this grade of school for the accomplishment of its work in the divided occupancy of the schoolroom; but in the four hours prescribed for the accomplishment of second-grade work and in the five hours for that of succeeding grades there is serious obstacle presented in the session of reduced hours consequent upon the want of proper accommodation for every school.

Viewed from the sanitary point, all of these schools suffer in the absence of essentials to hygienic condition, and more particularly those whose session begins in the afternoon, as in the interval of fifteen minutes between the departure of the forenoon school and the entrance of the afternoon school there is not sufficient time to effect thorough change of the air of the schoolroom. In the winter season the condition is more aggravated, as it often results in the loss of temperature so great as to make the schoolroom uncomfortable. The consequence is that the pupils of the afternoon schools are compelled to breathe and rebreathe much of the vitiated air resulting from the forenoon use of the room by the other school. There is also serious disadvantage to the afternoon school in the loss of the earlier hours of the day, in which larger and easier accomplishment is possible in the period of greater mental vigor. The ill effects from the want of time and proper conditions for effective grade work are not restricted to the present, but are felt in subsequent grades. Experience shows that the tendency of the reduced session in the afternoon schools is to the lessening of the attendance. To some extent this may be accounted for in the inconvenience to which parents are put, by the loss of the services of their children, through the later hours of school session.

The average number of pupils to the teacher, based on the average enrollment, was in the grammar schools 38.2; in the primary, 41.7. The average to the teacher in all the grade schools was 40.6. Forty pupils to the teacher are by some considered too many. Whether this number is too large or not depends much upon the teacher. Local conditions, in the absence of provision to enroll a larger per cent of the school population, do not favor a less number, since it would impose

illiteracy upon many that the schools are now made to embrace. An exception could possibly be made, with benefit to the pupil, in the first or lowest primary grade, in which the degree of dependence upon the teacher is so great as to make large demand upon individual attention an essential to giving that bent by which future effort may be facilitated and that training through which there is most promise to life. Another exception might be made with profit to those schools whose session is, from lack of proper accommodation, so reduced in time as to imperil in the reduction thorough completion of grade work.

In schools in which there was full opportunity for its accomplishment the work was generally satisfactory. In schools of reduced session the work was fair, and, for the degree of opportunity, as a rule there was evinced effort of most commendable character.

EXHIBITION OF SCHOOL WORK.

The occasion of the meeting of the National Educational Association in this city in July last was considered an opportune time for an exhibition of the work done in the schools of these divisions. It was felt that it would afford an excellent opportunity for intelligent criticism and suggestion by many of the thousands in attendance upon that meeting, from which the schools themselves could receive benefit; and if in the display made there could be seen points of superiority or excellence, the schools might exert an influence through which other schools could be benefited.

Several weeks before the close of the school year the schools were, through the supervising principals, informed of the decision to have an exhibition of school work and the teachers duly directed to collect and forward from the year's work in the schoolroom such as would truly represent the daily work of the school, and in such quantity as exhibiting space would permit, including maps and charts, illustration of the work made by pupils, and such other means as are used in the accomplishment of school work. The directors of special instruction and of manual training were similarly notified with reference to their departments that a proper display of the work under their direction might be made.

The exhibition, which occupied the larger part of the high-school building, was opened to the general public July 9, with daily periods of time—on Saturday from 10 a. m. to 5 p. m., and on Monday, Tuesday, and Wednesday from 12 m. to 5 p. m., and from 7 p. m. to 10 p. m.—and continued until July 13, inclusive.

The afternoon of the day before the public opening was set apart for the honorable Commissioners of the District of Columbia and school and other officials. The Commissioners showed their encouragement and appreciation by attending in a body. The president and some of the other members of the board of school trustees were also present.

DISCIPLINE.

The judicious means, as a rule, through which the discipline of these schools has been attained and is maintained have ample compensation in the results obtained. There are annually cases of suspension, corporal punishment, and dismissal. They are, however, restricted to a few schools.

During the year there were 149 cases of suspension from the privileges of the schools, or about 1 to every 100 of the entire enrollment. The cases include pupils who were suspended more than once during the year. In comparison with the cases of the preceding year, they were 10 more. The exclusion of the pupil is generally limited to a few days. The conference with the parent or guardian, when seeking the restoration of the child, as a rule secures the degree of cooperation which, in the closer attention to the child's conduct in the future, generally results in his good. It is the only avenue through which many parents are reached, as their lot in life prevents that occasional call upon the school which those better circumstanced in life find so helpful to the welfare of the child.

The cases of corporal punishment were 28, or 10 less than in the previous school year. As in the cases of suspension, the cases of corporal punishment do not indicate the number of pupils thus punished. The number of pupils punished is less, as the same pupil is somtimes punished more than once during the year. There was no case of severity. The degree of resort to it as a means of punishment may be seen in the fact that of the 255 schools there was resort to it only in 21 schools, or about 8 per cent of the whole number of schools. When the alternative is dismissal, it is usually inflicted, and generally with success. Its gradual elimination as a means of punishment may be seen in the fewer cases than in the earlier years now annually recorded. Its entire elimination, except by prohibitory rule, will scarcely result without the substitution of dismissal, which, in the deprivation of school privileges, would work greater injury to the child.

No pupil was dismissed during the year. This record is in consonance with the records of many past years, which shows that, in comparison with the entire enrollment for each year, the number of pupils thus annually excluded from the schools for incorrigibility or flagrant conduct is small. The annual average for the last thirteen years is 4.2, and, though in that period the record previous to this year has been as low as 1 to the year, it is the first in which no pupil was dismissed. The most of the pupils included in the number dismissed suffer but temporary loss of school privileges, since the punishment, as a rule, is restricted to the remainder of the school year in which it is inflicted. Such have the opportunity in the succeeding year to seek restoration to school.

While in the main the freedom of the school from these means of punishment indicates good disciplinary condition, it does not follow that

every school that has not resorted to these means is superior in respect to discipline to another having resort to them, since it is possible that the condition in one school for whose remedy there is resort to such means is tolerated in another. When, however, it is free from these penal means, and with good disciplinary condition, it may indicate larger degree of those qualities in the teacher essential to the evocation of the desired condition through better means; fuller recognition of the fact that the best discipline is largely incident to and resultant upon the steady and intelligent operation of the school, in the systematic arrangement of its details and the orderly movement in their execution, by which time is economized and energy conserved and properly directed; in attention born of interest and sustained by it in all pursuits through rational methods of instruction; and in inspiration to high and noble conduct through the personal influence and example of the teacher.

In the following table are presented the cases of corporal punishment, suspension, and tardiness in each school year during the last thirteen years, and the number of cases to every 100 pupils of the average enrollment; also the number of pupils dismissed from the schools during each year of the period:

[Normal School not included in this table.]

Year.	Average number of pupils enrolled.	Corporal punishment.		Suspensions.		Number of pupils dismissed.	Tardiness.	
		Number of cases.	Number of cases to every 100 pupils.	Number of cases.	Number of cases to every 100 pupils.		Number of cases.	Number of cases to every 100 pupils.
1885-86	8,191	159	2	250	3	3	3,906	47
1886-87	8,488	110	1	187	2	4	3,345	39
1887-88	8,754	78	.....	226	2	9	3,720	42
1888-89	9,049	94	1	267	2	8	3,868	43
1889-90	9,250	70	.....	234	2	5	3,913	42
1890-91	9,679	93	.....	210	2	8	3,714	38
1891-92	9,915	110	1	183	1	5	4,109	41
1892-93	10,072	102	.....	130	1	2	4,482	44
1893-94	10,116	65	.....	156	1	4	4,186	41
1894-95	10,021	44	.....	162	1	2	4,597	45
1895-96	10,266	75	.....	169	1	4	5,204	50
1896-97	10,391	38	.....	139	1	1	5,327	51
1897-98	10,523	28	.....	149	1	0	5,543	52

There is afforded by the above table facility for comparison, both to ascertain degree of excellence and that of progress, to extent that such items may determine.

HIGH SCHOOL.

The whole number of pupils enrolled in this school during the year was 690, of whom 417 were last-year pupils, 229 by transfer from the eighth-grade schools of the city, 27 from the eighth grades of the

county outside of the city, 3 by admission from other schools, and 14 otherwise admitted. The entire enrollment was 46 less than that of the previous school year. The average number of pupils enrolled was 593 and the average number in daily attendance 567. In each it was 47 less than in the preceding school year. The percentage of attendance, based on the average enrollment, was 95.5.

In the excess of the enrollment of this school over the accommodation which the building affords, even after the previous taking of its study halls and reducing them to class rooms, by which much inconvenience and loss of facility have been experienced in the deprivation of these valuable adjuncts to the properly equipped high school, it was still necessary to continue the use of four schoolrooms in the Garnet building. The continuance of this severance from the main building was not without continued disadvantage to the section of this school there located in the unfavorable effect upon the attendance of pupils, from the degree of inaccessibility imposed upon many by the greater remoteness, in the inability to avail of the auxiliary and corollary means for strengthening the instruction found in the school library and reference books, in the prevention of the most economical and efficient use of the teaching force by its division, and in military and other instruction to the school as a whole.

In the current school year a betterment of the conditions has been sought by the transfer of the business department to three rooms on the second floor of the Douglass School, which is situated in the vicinity of the High School. Though this accommodation in its extent is less than that afforded by the Garnet building, the change is believed to be in the line of minimizing the disadvantages felt by the removal of any portion of this school from its body.

It is thus seen that larger accommodation is needed, and sorely needed, for this school, either by enlargement of the present structure, which, in my opinion, will require least expenditure, and is preferable, both in point of administration and in economy of teaching force, or by the erection of an additional building in some other section of the city.

There were employed in this school 27 teachers, inclusive of the principal. Of this corps 16 were male and 11 female. The latter constituted only 40.7 per cent of the whole number. Of the average number of pupils enrolled in this school last year 182 were boys and 411 girls. The latter embraced 69.3 per cent of the average enrollment.

In my opinion, this very large preponderance in the enrollment of girls should be recognized by the larger employment of female teachers, if they can bring to the position scholastic attainments equal to those of the male teacher. In the training of these girls the intellectual should not be the only end sought. The training should not be one-sided. It should be recognized that there are more sides to be trained, and such as can be best trained through the strong moral influence

and personal example permitted by large contact and association with the ablest and best of their own sex. There may have been a time when it was impossible or difficult to secure the female teacher as liberally educated and equipped for the position as the male teacher. That time has passed, in attestation of which are the applications for such position that are now annually made, with strongest references and commendations as to moral character and scholarship.

This view is not expressed by way of disparagement of the services of our male teachers, for in extent of intellectual and moral qualifications they, as a rule, render faithful and excellent service; but it is made in the belief that girls in the High School are at that period of life in which the impress of good and noble womanhood is most, if not only, assured through the constant sympathy, intuitive direction, and potential example of the thoroughly qualified female teacher.

Another need of this school is the larger employment of experienced teachers. It is probable that to secure and to retain them greater inducement in salary than now obtains will be necessary. The compensation, however, will be ample in the character of the work performed and in the prestige given to the school.

The following table shows the absolute and relative growth of this school during the last fourteen years, giving the number of teachers employed, the entire enrollment of pupils, the number of each sex in the enrollment, and the number of graduates:

Year.	Number of teachers.	Whole enrollment.			Number of graduates.
		Boys.	Girls.	Total.	
1884-85	4	22	150	172	28
1885-86	6	37	210	247	33
1886-87	8	51	225	276	39
1887-88	9	73	288	361	51
1888-89	11	81	335	416	67
1889-90	12	64	281	345	41
1890-91	14	82	294	376	86
1891-92	17	104	303	407	69
1892-93	18	117	327	444	90
1893-94	19	140	320	460	99
1894-95	22	197	421	618	131
1895-96	24	198	477	675	49
1896-97	26	215	521	736	79
1897-98	27	220	470	690	103

The enrollment of boys, which in the earlier years was small in proportion to that of girls, has with following years proportionally increased. Last year it was almost one-half of that of girls. The causes lie in the larger and growing opportunities for preparation for life through the more practical instruction in the business department, through the lines of manual training, and through the possibility for the attainment of teachership.

The commencement exercises of this school were held on the evening of June 22, 1898. There were graduated 103 pupils, of whom 38 were from the academic, 43 from the scientific, and 22 from the business course.

The report of the principal of this school to this office, which gives in detail its operations, is herewith presented.

NORMAL SCHOOL.

The whole number of pupils enrolled in this school during the year was 56, of whom 13 were male and 43 female. Thirty of the entire enrollment were in training the previous school year. The remaining 26, who through effort during the four years of the high-school course and results obtained in the examination held June 4, 1897, had a standing above that of other applicants, were admitted to this school at its reopening in September.

The degree of qualifications as shown in the attainments of the pupils admitted is generally good. This is due largely to the fact that, with rare exceptions, all members of the high school graduating classes, eligible by rule to compete for this training, enter into the competition, and since the number to be admitted is limited this school receives from the best product of the system. These qualifications naturally grow in excellence with the growth of the system.

The degree of effectiveness of the work of this school is best seen in that of its graduates in the schoolroom, which is generally of satisfactory character. The degree of ease in ability to govern and control from the outset evinced by these is often a subject of remark. While much of it is due to practice in the practice schools, under due supervision, instruction, and direction, it is not improbable that there is some foundation for it in the influence of early formed desire to teach for a livelihood, caused by the large absence of opportunity for other occupation not menial, which, during pursuit of study in the lower grades of school, has led to close observation of the means and methods employed by teachers in the maintenance of well-ordered schools. Other considerable opportunity for the development of such power may also be found in the homes of many to whom the care and crontrol of younger children are intrusted by parents while they are in pursuit of the necessities of life.

On the evening of June 22, 1898, the pupils who had satisfactorily completed the course were graduated. This graduation was the first in these divisions from the two-year course for this school.

The report of the principal to this office is herewith submitted.

PRIMARY WORK.

The position of director of primary work was created in these divisions of the public schools shortly after the beginning of the last school year. A teacher of large and successful experience—and at that time

a principal of one of the schools—was selected and assigned to the position. Her duties were restricted to the first three grades of school. The results from this appointment were of gratifying character, and in the experience gained during the year there is promise of larger results in succeeding years.

In the earnestness and enthusiasm which characterized the director in the discharge of the duties of the position, and in the growing intelligence from constant research through which to effect ablest discharge, there is large hope for the future.

By the creation of this position the supervising principals, whose schools had considerably increased in number, were relieved of much labor and anxiety in the time afforded for closer supervision and direction of the schools under them than was possible without this or some other provision.

The report of the director to this office is herewith submitted.

TEACHERS.

The whole number of teachers employed in these divisions of the public schools during the year was 318, of whom 46 were male and 272 were female. The corps in its individuals differed from that of the previous year only to the extent of teachers required for the new teacherships and to fill vacancies caused by resignation and death. The number of new teacherships was 10; the number of teacherships made vacant by resignation and death was 6.

The classification of teachers and the number of each class were as follows: Of primary schools, 170; of grammar schools, 74; of high school, 27; of normal school, 6; of special subjects, and not permanently in charge of any school or class, 41.

The qualifications brought to the teacherships of these schools by the teachers employed are, as a rule, reasonably liberal. In respect to their scholarship, very many of them have the high school training, and quite a number that of the college. The latter class gradually increases annually.

In professional training for the position the number is large. The teacherships of the graded schools are almost wholly filled by normal graduates; and as the supply of this class of teachers, who have precedence in all appointments to the graded schools, is larger than the demand, it is constantly increasing. Last year it embraced 83.2 per cent of the whole number of teachers in charge of graded schools.

The composition of the corps at present as to scholastic attainment, as indicated by the character of the school or institution from which graduated, is as follows: From high school, 219; from college, 27.

A more definite exhibit of the training, scholastic and special, of the whole number of teachers employed will show that 26 are graduates of the high school only, 36 are graduates of the normal school only, 193 are graduates of both the high and the normal school, 27 are

graduates of the college, and 3 are graduates of the normal school and the college.

Teachers not classified in the above are those possessed of the qualifications essential to the discharge of the work in the special departments in which they are employed, and a few, in the graded schools, whose services have become valuable through long years of successful experience and private study.

In addition to qualifications, scholastic and special, the corps as a whole has had large local experience—experience ranging from that of the beginner's, as in the most recent appointments, to that of more than thirty years. To this long and intelligent experience which permits large knowledge of local conditions and needs and encourages means for their betterment, is due much of the success that has followed the work of these schools.

While I am of the opinion that larger salaries generally than those that now obtain would more nearly compensate for services rendered by the teacher in all grades of school, I am more decidedly so with respect to that of the lowest grade of school, to retain in it the teacher that seems peculiarly adapted to its work. Through such retention there would be larger promise of impulse that will be felt for good in all subsequent training. In this grade experience is especially required for due recognition of the great responsibility resting upon the teacher in all effort to awaken and direct mind, that influences and activities may be set to work through which the best product, moral and intellectual, may be evolved. In the inducement now held out in the greater salary of succeeding grades, as provided by the present schedule of salaries, it is difficult, and impossible without injustice to her, to retain the teacher in this grade.

The number of days the teacher was absent on account of ill health was 984. This absence was restricted largely to a few teachers. It goes without the saying that in every well-conditioned school the absence of the regular teacher, whether for a short or a long period of time, is a misfortune, inasmuch as it imposes upon the school a loss, more or less, in the time required by the substitute teacher to gain that individual knowledge of the pupils so essential to the proper discharge of the duties of teacher. The experience of the year, which was but a supplement to that of past years, showed that the work in such schools was not always of very satisfactory character. There were not wanting instances for the inference that pupils not prepared for advancement to the next grade would have been prepared had the teacher been regular in her attendance.

NIGHT SCHOOLS.

There was no increase in the number of night schools over that of the previous school year. The six schools, located at the Stevens, Wormley, Cook, Garnet, Lincoln, and Randall buildings, two in each

of the three divisions, were reopened October 4, 1897, and closed January 26, 1898. The pressure for admission to these schools was equally great as in past years. Precedence in admission is given to those who were members the last year, provided they return the first night. After the first night admission is given in the order of presentation, to extent of the accommodation, and preferably to those within day-school ages.

The entire number enrolled during the term was 1,395. They were of ages ranging from 13 to 63 years. Those of the day-school ages attend the night schools, not as a matter of choice, but of circumstances in life forbidding attendance upon the day school.

The average number of pupils enrolled during the term was 921, and the percentage of attendance, based on this enrollment, was 87.7. The average number of pupils of the average enrollment to the teacher was 36. This number, in its good proportions, and maintained with but little variation from year to year, indicates quite forcibly the degree of interest in these schools.

The whole number of teachers employed was 25, of whom 6 were principals. The degree of care had in previous years in the selection of teachers for these schools was maintained. Teachers were selected for the principalships from the day-school service, and for such teacherships as could not be most efficiently filled through other sources. These night-school principals, as a rule, bring to the position large experience from similar position in the day schools, and to this fact is largely due the good work done in these schools. The subordinate positions were filled by other than the day-school teachers to the extent that qualifications equal to the position could be found outside the day-school corps.

The aim has been to give to this service, to extent practicable with due regard to other interests, the best teaching force available. The school, in its embrace of all the interests of the pupils, was always the major, if not sole, consideration.

Of the 25 teachers employed 10 were from the day schools, 10 from teachers of more or less experience not connected with the day-school service, and 5 from graduates of the Normal School, with experience limited to that of substitute in the day schools. Whenever practicable those having had successful experience in the night-school service are continued from year to year, and the good results from this practice are in justification of it.

The number of evenings these schools were opened was 42, which, with a session of two hours each evening, allowed an aggregate of eighty-four hours for the whole term. The too great shortness of this time for very appreciable result is patent. These schools should have sessions lasting through six months, beginning with October and extending to April.

The amount of money allowed to these three divisions of the public schools for the night schools was $2,100, or $200 less than in any previous school year. The insufficiency of this sum required the closing of

these schools at a period but little removed from midwinter, a period of the year when no difficulty would be experienced in the maintenance of good attendance. The paucity of this sum of money not only closes these schools at too early a time for due or reasonable acquisition, but also prevents the extension of their work to other sections of the city where equally large degrees of illiteracy exist, and where, in the opportunity offered by them for beneficial occupation of time, much is possible for the amelioration of objectionable existing conditions. An appropriation that would permit to these divisions of the public schools, in which are to be found by far the largest degree of illiteracy, an expenditure of even twice the present amount would be sensibly felt in the good it could effect.

It is a matter for regret that the two evening cooking schools that were opened in these divisions have both been closed from the want of means with which to continue them. The number was at first reduced to one, on account of the less amount of money allotted to these divisions in that year for night schools, and last year, when the amount of money was still further lessened, it was found necessary to close that one. The good from instruction in cookery to very many of this class can scarcely be questioned. The change it promises, both in physical and moral conditions, through the proper selection and preparation of food, as well as economy in its use, is sorely needed.

The discipline of these schools is excellent, and is apparently maintained without effort. The interest in the instruction and the earnestness and enthusiasm in pursuit of the different branches of study give ample assurance of appreciation of the privileges afforded by this provision.

The following table gives, among other items, the entire enrollment, the average enrollment, the average attendance, the number of teachers employed, and the cost of instruction in each of the six night schools, as well as for all:

Night schools.	Whole enrollment	Average enrollment.	Average attendance.	Percentage of attendance.	Time.		Number of teachers.	Average number to the teacher.[a]	Cost per night.	Aggregate nights' attendance.	Aggregate nights' absence.	Entire cost of teaching.
					Number of nights.	Number of hours.						
Stevens	258	154	120	77.9	42	84	5	30	$9.50	5,050	1,427	$399.00
Wormley	80	71	64	89.9	42	84	3	23	6.50	2,671	298	273.00
Cook	282	188	171	91	42	84	4	48	8.00	7,170	709	336.00
Garnet	247	151	131	87	42	84	5	30	10.00	5,526	819	420.00
Lincoln	247	160	142	88.6	42	84	4	52	8.00	5,966	763	333.00
Randall	281	197	180	91.1	42	84	4	49	8.00	7,561	724	336.00
Total	1,395	921	808	87.7	42	84	25	36	50.00	33,944	4,740	2,097.00

[a] Based on the average enrollment.

Herewith are submitted the reports made to this office by the principals of the several schools, giving in more or less detail their operation and contributing much in support of the recommendation to extend this service, both as to accommodation and as to length of time for instruction.

STEVENS NIGHT SCHOOL.

WASHINGTON, D. C., *January 26, 1898.*

DEAR SIR: As my first annual report as principal of this school the following is submitted for your consideration:

The number of pupils enrolled the first evening, October 4, 1897, was 56, which increased until the total enrollment amounted to 258, representing all grammar and primary grades, each teacher having under control two grades.

The three changes made in the teaching force of the school during the year, relieving those who had been accustomed to the work and placing in raw material, worked against the best interest of the pupils. The season being short, changes should not be made during the term except from unavoidable causes.

Frequent talks concerning health, diet, and ventilation were given.

Penmanship was taught in all grades, the greatest interest being manifested in the first grade, where many for the first time learned to write their own names. As this subject has always been considered one of the three that are indispensable, much time was given to it, and, while the mechanical execution was not as satisfactory as the work of younger pupils, yet the time spent yielded profitable results.

Oral and written spelling were taught in all grades, together with a thorough knowledge of the use and meaning of the words. The spelling was not confined to the set lessons found in the speller, but was taken from all subjects taught. In the oral work the pupil was required to pronounce the word correctly, both before and after naming the letters, and to divide it into syllables.

Recognizing that the object in view in teaching reading is to prepare the pupil to read with profit and pleasure to himself and others, much stress was laid upon this branch of education. The chief difficulty in teaching this subject in an evening school is to get the pupil to recognize the word on the printed page. Little or no trouble is experienced in getting a correct interpretation of the paragraph or lesson read. The amount read was of secondary importance; to cause the pupil to know the words and express the ideas received were foremost in our plan.

The science of numbers, if pursued aright, leads the pupil into exact and logical modes of thought on all subjects and prepares him to deal with the business problems of life to which numbers may be applied. Skill, accuracy, and rapidity are essentials; accuracy first, with rapidity as a close second. Its practical utility was specially directed to notation, numeration, fundamental principles in the lower grades, and fractions, denominate numbers, and the principles of percentage in the upper grades.

The studies of geography and history were linked by means of the Geographical Reader and Scudder's History.

Too much can not be said of the constant earnestness of the assistant teachers. The general desire of the pupils was that, if possible, the term be extended, so that the interest aroused be not interrupted at its highest point. At least a month and a half could be added to the term without detriment.

Very respectfully,

M. L. WASHINGTON, *Principal.*

Mr. G. F. T. COOK, *Superintendent.*

WORMLEY NIGHT SCHOOL.

WASHINGTON, D. C., *January 26, 1898.*

DEAR SIR: I respectfully submit the following statement of facts concerning the Wormley Night School, which closed its session on the above date:

The whole number enrolled was 80; the average number enrolled was 71; the average attendance 64, and the percentage of attendance 89.9.

The attendance was not as full as during the past years, owing possibly to the repeated change of teachers. The recently appointed teachers, however, have done excellent work in the limited time allotted them. There is no new fact to which I wish to call attention relative to the school.

Respectfully,

A. M. MASON, *Principal.*

Mr. G. F. T. COOK, *Superintendent.*

COOK NIGHT SCHOOL.

WASHINGTON, D. C., *January 26, 1898.*

DEAR SIR: In submitting my annual report of the John F. Cook Night School for the term commencing October 4, 1897, and closing on the above date, kindly allow me to make the following remarks:

As is shown in the accompanying report the enrollment has been throughout the term cumbersomely large, and we were compelled to deny admission to quite a number for want of another teacher. This is indeed gratifying on the one hand, but woefully lamentable on the other—gratifying to see the great army of anxious boys and girls, young men and young women, and old men and old women, who, because of some condition or conditions, have been denied the privilege of acquiring learning earlier in life or under more favored conditions, weary and worn with the labor and cares of the day, wending their way to school and evincing so much interest in all that tends to improve them. This is the bright side, and now for the dark side. It is woefully lamentable to see so many bright hopes so suddenly crushed by the denial of a most blessed boon to them. "Only forty-two nights!" "What can be done to secure us longer time?" "To whom should we appeal for longer time?" These and similar expressions could be heard on every hand. And I feel constrained to join in the cry for longer time for our patrons of the night schools. They are not the noisy, disturbing element that once attended, but patient, hard-working people who are earnestly putting forth every known effort to fit themselves for better citizens. Should they not have every inducement offered? In the name of this worthy number I appeal to this generous Government to extend a helping hand in this their great need. Only by lifting the masses, giving the proper impetus to the future mothers and fathers, fitting the mother for her gigantic task and the father to grace his lordship,

"Can we attain
To those turrets, where the eye
Sees the world as one vast plain
And one boundless reach of sky."

Were I physically able to perform this work, together with my more arduous task, nothing could give me more pleasure than to labor in this interesting field; but prudence dictates otherwise, so I reluctantly surrender.

Very respectfully,

E. F. G. MERRITT, *Principal.*

Mr. G. F. T. COOK, *Superintendent.*

GARNET NIGHT SCHOOL.

WASHINGTON, D. C., *January 26, 1898.*

DEAR SIR: The following statement of the work done in the Garnet Night School is respectfully submitted with the annual report for the term ending January 26, 1898:

The total enrollment for the term was 247 pupils, of whom 72 were in the business department and the remaining 175 in the primary and grammar grades. From this distribution it will be seen that, as compared with the preceding term, the school, in point of enrollment at least, has about held its own. In the matter of nightly attendance, however, the business branch of the school has been less fortunate. The more remote situation of the building with respect to the residences of many of the pupils enrolled produced in the attendance an irregularity which the feeling among the pupils that the term would be brief tended not a little to increase.

In the course of instruction no material departure was made from the work of the preceding term, language and number continuing to receive, as heretofore, the share of attention due to those important subjects. In addition to reading, spelling, and dictation, which entered into the language work of all the grades, attention was called, in the grades above the fourth, to the more formal rules of grammar, the noun, the verb, and the adjective serving as subject-matter at this stage of the work. The arithmetic work, ranging from the fundamental operations to the principles of percentage, was made as practical as possible, particular attention being paid to common and to decimal fractions, as also to denominate numbers.

With the exception of typewriting, which, owing to the large increase in the number of machines at the command of the pupils, yielded more satisfactory results, the business subjects showed no marked improvement over the work of the preceding term. Not least among the causes contributing to this result must be considered the shortness of the term, the ill effects of which were but too apparent in the business class, as, from the nature of the subjects pursued there, much more time is required, even for results the least satisfactory, than was afforded by the forty-two evenings of the session. Another and hardly less serious consequence of the short term was that it tended not only, as has been stated, to affect unfavorable attendance, but also, there is much reason for believing, to prevent many persons who might otherwise have enrolled themselves from so doing.

It is earnestly hoped that in the near future ample provision will be made for a term sufficiently extended to enable the pupils to derive from this branch of the work all the benefits of which it is capable.

Very respectfully,

D. B. THOMPSON, *Principal.*

Mr. G. F. T. COOK, *Superintendent.*

LINCOLN NIGHT SCHOOL.

WASHINGTON, D. C., *January 26, 1898.*

DEAR SIR: I herewith submit a brief report of the Lincoln Night School for the year ending January 26, 1898.

I noted with much interest the return of many of the last-year pupils. The attendance was good, and so earnest were the efforts of the pupils that the progress was most satisfactory. It was with deep regret that they received the announcement of the close of the term. In conclusion, I wish to commend the efficient work of my associate teachers.

Very respectfully,

K. U. ALEXANDER,
Principal.

Mr. G. F. T. COOK, *Superintendent.*

RANDALL NIGHT SCHOOL.

WASHINGTON, D. C., *January 26, 1898.*

DEAR SIR: In submitting my records and reports of the Randall Night School, which closed with this date, I shall add a remark or two to the general character of the work.

The enrollment this year was 281; of this number 85 were "last year's." The fact that so many return from year to year keeps the schools intact and proves that the people are interested in the schools, and are both willing and anxious to learn.

The general progress of the work has been exceedingly gratifying to all the teachers. The aim is to benefit the pupils and aid them along all lines of improvement; to this end the work is made as simple and as practicable as possible.

There is but one thing that retards the work of the schools and it is greatly desired—that a larger number of nights be given to these schools.

The teachers have been prompt, faithful, and energetic, and are devoted to the interest and welfare of the pupils.

Very respectfully, JAMES STORUM,
Principal.

Mr. G. F. T. COOK, *Superintendent.*

PHYSICAL CULTURE.

There were, as in the previous year, 4 teachers in charge of this instruction, of whom 1 was director. These teachers, by direct teaching, exemplify in the schoolroom, in the presence of the regular teacher and school, the instruction to be imparted, and during the interval the drill to secure the attainment is made a part of the duty of the regular teacher. The instruction, which embraces all schools, was maintained with a degree of satisfactory result, comparing favorably with that of past years.

The advantages of this instruction in securing proper posture of the body while sitting or standing, erect carriage in walking, and in its general tendency to symmetrical development, apart from the educational tendencies to the acquisition of habits of mind essential to success in intellectual pursuit, are more and more seen as time permits opportunity for result. It also has large value in the recreation afforded through change from intellectual pursuit and in its contribution to the discipline of the school.

The report of the director is herewith submitted.

MANUAL TRAINING.

The shops for wood working are located at the Miller, Stevens, Randall, and Lincoln buildings. Those at the Miller Building embrace all stages of the work of instruction, while those at the other buildings are restricted to first-year work. In number these shops are sufficient to accommodate all boys of the eligible grades, but in the character of the accommodation and in equipment there is much room for improvement.

The number of boys who received instruction in them during the last year was 982, of whom 959 were from the graded schools and 23 from the high school.

The whole of the ground floor of the Miller Building is given to work in metals. One of the two rooms is used for the smithy and the other for machine work. The number of boys who received instruction in the department of metal work was 133, of whom 13 were from the high school.

The great need of these departments of instruction is accommodation, enlarged, and of character adapted to purpose of use. The Miller Building, which furnishes most accommodation for this instruction, is a three-story structure, built many years ago, with no consideration whatever to the requirements of its present use, hence ill adapted to it, and in condition to justify constant anxiety as to its perfect safety, especially when the machinery used in the instruction is in operation. The shops outside of the Miller Building are in basement rooms of graded-school buildings, which are ill adapted in some respects to present use, particularly in the want of proper light and ventilation.

The whole number of teachers employed in giving instruction in wood and in metal working was 8.

The report of the director of this department of instruction to this office is herewith submitted.

COOKING.

Instruction in cookery is restricted to girls of the seventh and eighth grades and, optionally, to those of the high school. The whole number receiving instruction during the year was 787, and of each grade as follows: Seventh grade, 395; eighth grade, 305; high school, 87.

The number of kitchens or schools in which this instruction was given is four. They are located as follows: One in a basement room at the Stevens Building; one in a basement room at the Randall, and two at 917 P street NW., in a two-story rented building. These rooms furnish fair and reasonably accessible accommodation to the schools of the respective localities and their vicinities, though accommodation difficult of access to schools farther removed, in the long distance of the kitchen from the graded school. This difficulty can be largely removed, and without increase of the teaching force and the quantity of perishable material used in the instruction, by locating one more kitchen, to be used only on certain days of the week, for the instruction of classes from graded schools in that vicinity. By such provision the teacher could close one kitchen for the day, or part thereof, to meet classes in another kitchen.

The want of owned accommodation and the lack of funds with which to rent accommodation prevent the locating of another kitchen, notwithstanding the fact that pupils in graded schools in the eastern section of the city have now to travel 2 miles to the nearest kitchen to receive this instruction.

The number of teachers employed in giving instruction in cooking is 5.

The report of the director is herewith submitted.

SEWING.

In addition to the instruction of all girls of the third, fourth, and fifth grades in the regular schoolroom by the special teacher one hour weekly, instruction in the cutting and fitting of plain garments was given to all girls of the sixth grade in the three shops. These shops are located at the Miner, Garnet, and Lincoln buildings.

Like the kitchens, they are ample at present to give accommodation to all girls of the eligible grade, but not to all receiving this instruction good degree of accessibility.

The number of girls who were instructed in sewing during the year was 2,576, of whom 2,070 were in the third, fourth, and fifth grade schools and 506 in the sixth grade.

The number of teachers employed in giving instruction in sewing is nine, of whom one is director. Their hours of employment are coextensive with those of the regular teachers, each giving instruction to four classes each day.

The report of the director to this office is herewith submitted.

CONCLUSION.

Time, in its opportunity for fair trial, has removed many of the complaints of interference with the work of the regular school that were so rife when training along these lines was first introduced into the schools. One complaint, however, remains, and seemingly with good basis. It lies in the loss of time to the regular teacher, in the repetition of instruction frequently made necessary by the division of a class, in sending some of its members to kitchen or shop while others remain in the school. As there are two classes in the school, if an entire class were put under special instruction at one and the same time the school would be less disturbed, and the teacher could, during the absence of one class, give her whole time and attention to the other. The removal of the cause for this complaint is prevented by the want of provision for the instruction of larger numbers at one time at the kitchen or the shop.

In my opinion, it would be better to have in each division of these schools two kitchens, two sewing shops or parlors and, possibly, two shops in the first year of wood working. Through such provision the complaint above named could be removed, as the accommodation would be sufficient to instruct at the same time the entire class from the regular school. These kitchens and shops should be so located as to afford to the graded schools good degree of accessibility. Not more than one shop of any kind in any one building would give a distribution which would least interfere with accommodation for the graded schools. In the building of new schools there could be provided in some, to extent needed, a room of suitable size and adaptation to intended use; and, in its occupancy, any room previously taken from existing graded schools could revert to former use. Owned accommodation for these kitchens

and shops is favored by the difficulty now experienced in effort to rent suitable rooms in localities which offer good degree of accessibility to the graded schools.

In none of these departments of training was there any abatement of the interest manifested in former years. When the fact that the weekly periods of instruction along these lines of pursuit, not more than one hour and a half each, do not aggregate in the school year forty periods, or twelve school days of five hours each, is considered, there is much reason for satisfaction with the degree of good result obtained.

Pursuit has been sufficiently long to reveal large educational value of this instruction in diversion from purely mental work and in tendency to concentrate mental effort. Taken in its educational aspect, in its development of qualities and creation of habits essential to all successful intellectual pursuit, as well as to that in any of the varied industries of life, its value can not be questioned. The value of this training in the awakening of talent, through the development of large aptitude for mechanical pursuit, promises much to the future well-being of the pupil and to the community in determining a course of action in his life, through which large contribution may be made to its interests.

Very respectfully,

G. F. T. COOK, *Superintendent.*

The BOARD OF SCHOOL TRUSTEES,
District of Columbia.

TENTH DIVISION.

WASHINGTON, D. C., *June 30, 1898.*

DEAR SIR: I forward you herewith my annual report of the schools of this division.

I wish also to report that the schools, while far from ideal, have been in the main satisfactory.

I desire to acknowledge the courtesies received from you during this year, and to express to the local trustee, Mrs. Terrell, my appreciation of her uniform interest and encouragement.

Yours, truly,

J. H. N. WARING,
Supervising Principal.

Mr. G. F. T. COOK,
Superintendent of Schools.

ELEVENTH DIVISION.

WASHINGTON, D. C., *June 30, 1898.*

DEAR SIR: The second annual report of the present supervision of this section of the public schools is herewith presented:

Throughout the term an earnest effort has been made to fill in and complete the outline of work laid down in the course of study, making

such changes from time to time as were suited to our condition and environments.

The chief source of concern has been to keep before the teacher the aim of the recitation. Every lesson should be given for some definite purpose, and the accomplishment of this purpose must be the central thought of the teacher when she meets her class and goes through the recitation with them.

The difference between effective and ineffective teaching lies almost wholly in the aim or want of aim on the part of the instructor. Is it the purpose of the teacher to simply inform the mind by the steady pouring in of facts contained in the text-books, leaving the intellectual development to mere chance, or is it her intense desire to develop the powers of the mind of the child through his own activity so that the desire for knowledge may become a controlling influence in after life? Too many, it is feared, are bent upon the former rather than the latter idea. This desire that the majority have of instructing rather than educating their pupils was clearly brought out at the close of this year when it became known that no written examination by the supervisor would be given for the purpose of finding what per cent of facts, by the teacher's aid, had been stored away in the minds of the pupils, and in this manner the various schools might be compared with one another on the basis of marks obtained. A sore disappointment settled upon the faces of many who had worked the entire year with this end in view. Our idea is that schools should be rated from personal tests made by the supervisor during his visits throughout the year, but not at any set period. Should a written test be deemed desirable, then it should be given without any previous notice and for the purpose of indicating the line of work which a teacher should follow or to find out whether the teacher is training her pupils to habits of accuracy and neatness in written work, the matter called for being somewhat similar to that taught from day to day. In this way will be shown whether the teacher is simply instructing or is doing her duty in educating her pupils.

In order that there may be a definite purpose in the minds of the teachers, let me suggest that they be required to meet in the room of the principal each day immediately following the close of school, and there make an outline or plan of lessons to be followed the next day. This planning will serve the purpose of concentrating the mind of the teacher upon a definite aim, and will be of great assistance to the substitute should the teacher be absent.

The last report contained the thought that the management of the schools and the professional spirit which pervades a department of instruction may be judged from the programmes carried out in the meetings held by the supervisor with the teachers. Following this line of thought, a number of meetings were held each month in the various buildings in this division. These gatherings were highly beneficial, in

that each teacher studied the topic assigned, so as to be able to present her views clearly and correctly when the time for discussion came.

The schedule of programmes for the meetings in their order was as follows:

Course of study: Composition and Grammar..Supervising Principal E. W. BROWN.
Lincoln School: Truancy: Its Causes and Cure:
The Parent's Duty.....Principal Miss M. P. SHADD.
The Value of Punctuality.....Miss A. V. THOMPKINS.
The Teacher's Example.....Miss F. P. MARTIN.
Habit of Punctuality.....Miss G. E. SHIMM.
Randall School: The Recitation:
The Art of Questioning.....Principal Mrs. M. E. TUCKER.
The Attitude of the Teacher.....Miss M. A. WHEELER.
The Aim in Recitations.....Miss. L. C. RANDOLPH.
The Time Required.....Miss H. V. LEE.
Giddings School: Discipline:
Objects Sought .....Principal Miss L. A. SMITH.
Justifiable Suspensions.....Miss M. L. JORDAN.
Bell School and Ambush School: Hygiene:
Home Hygiene .....Principal Miss L. F. DYSON.
Habits of Pupils .....Principal Miss A. S. BAILEY.
Admission of Light.....Miss L. E. WARING.
Ventilation .....Miss L. A. PEEBLES.
Anthony Bowen School: Geography:
How to Teach Geography .....Principal Miss J. C. GRANT.
Primary Geography .....Miss C. H. SMYTH.
Map Drawing .....Mr. ELIAS BROWN.
Lovejoy School: Promotions of Pupils.....Principal Miss. R. J. BALDWIN.

The discussion following each of these papers was marked by a degree of frankness and earnestness, as well as an enthusiastic search for the truth, which had been suggested in the papers read. The purpose was to concentrate the thoughts of the corps upon a specific topic, and correlate such other matter as naturally presented itself.

SPECIAL DAYS.

Thanksgiving Day furnishes an opportunity to inculcate the spirit of philanthropy. There has been instituted in these schools the practice of bringing some small gift, to be distributed among the worthy poor and needy. Nothing costly is requested, a potato, an apple, or a bundle of wood being about the average gift. Parents have given encouragement to this annual observance, and their response, in proportion to their means, has always been large. This spirit is manifested by the corps of teachers, and is shown by their giving concerts for the purpose of supplying shoes to those pupils who otherwise would be kept out of school.

Douglass Day is an occasion that may be utilized in bringing to the mind of the child facts in the history of the race and gleaning from these events the idea that one may outlive his environments and, surmounting all obstacles, come at last to be recognized as a man among men. Through this observance the children are beginning to respect

more and more the life and character of the great apostle of freedom, Frederick Douglass.

Washington's Birthday affords a special opportunity for calling attention to the early history of the colonies and their struggles for liberty. Readings, recitations, etc., combine to form an interesting school hour. The admiration in which Washington is held is thereby increased and strengthened.

Little good is accomplished by the turning of the children of our schools into the streets on Emancipation Day. The majority of the parents are away from home following their daily vocations, and the children are released from all proper control to view sights that are at once demoralizing and degrading. A better way to observe this day would be to have in the schoolrooms suitable exercises commemorating the events which gave rise to its birth. At such times it would seem fit to call to the minds of the children the memories of B. K. Bruce, John M. Langston, and such other race characters as from time to time we may be called upon to celebrate. Let these exercises be held in the forenoon, the schools being closed in the afternoon as a further token of respect.

Decoration Day is certainly effectual in its influence toward elevating and intensifying the love for our country. On the day preceding this, the bringing of flowers with which to decorate the graves of the heroic dead is the teachers' opportunity for implanting the principles of patriotism in the hearts and minds of the young. The narration of the events connected with the late civil strife for the preservation of the Union will of itself serve to keep alive the seed of patriotism sown in the mind of the child while prattling around its mother's knee. The great interest taken by every family in the day is the clasp that binds fast the early impressions which will be reserved till the days of maturity.

We are not troubled in these schools by the great influx of those from other shores. The only excuse we can offer for teaching patriotic sentiments in the classroom is lest the child with his awakening intelligence becoming cognizant of the wrongs perpetrated upon him and his race by a few thoughtless people should forget his earlier home instructions and be tempted to rise in rebellion against the Government that has nurtured and educated him. We have no anarchists among us, and the only way to keep such a happy condition is to water the seed of patriotism at every convenient moment until maturity comes with its full fruition.

MUSIC.

The refining influence which music exerts over pupils, to say nothing of its mental discipline and the assistance it gives other subjects, more than compensates for the time assigned it on the daily programme. Apart from the teaching of a regular course in music, the teachers have been encouraged to have their schools sing those sweet, soul-reviving strains which the children have learned in their various Sunday schools. It seems a pity that those melodies which were sung by our forefathers

have not been modernized sufficiently to meet the taste of the educated of our people. That teacher who has no music in her soul is certainly a dead tree in the scholastic field, and it were better for her and those under her control that she should give way to some one else. Nothing seems more effectual in bringing order out of confusion and to place the souls of the little ones in unison for whatever work lies before them. Luther says: "Music is a discipline, a mistress of order and good manners; she makes the people milder, gentler, more moral, and more reasonable."

PHYSICAL CULTURE.

The general attitudes of the children are diligently attended to, and we no longer see much of the slouching gait, round, uneven, and forward shoulders, drooping heads, stooping bodies, and the like; in a word, there is being developed the well-built child, with an erect attitude, well-poised head and neck, straight spine, firm knees, broad and rounded chest, rightly hung arms on equally squared shoulders. The cultivation of these points is carefully and persistently maintained, not only during the exercise period, but at all times, with a watchful eye; the common faults are soon corrected and a manly style substituted for the once too common and unhealthy slovenliness.

It is gratifying to notice the interest manifested by the teachers and pupils in carrying on the work laid out by the directress of this department. All seem to be thoroughly impressed with the benefits arising from regular and systematic exercises. Pride is taken in securing promptness and accuracy in executing the different orders. The disciplinary influence of requiring a pupil to perform several acts promptly in harmony with fellows is worth much to him and the school. The effect of such work is far-reaching. Prompt returns come in added zest in the succeeding study periods, while the benefit to health and the orderly development and graceful carriage of the body are some of the facts which will be appreciated later in life.

Drawing is pushed with the usual vigor, and the success attending the efforts of the efficient head of its department is still maintained. The introduction of work which the teachers and pupils believe to be of practical utility has added much to the interest in the return of the drawing periods.

The other special work in the different departments is well handled by the directors and their assistants.

In reference to the work outlined by the drawing and music departments, the reports sent in by the teachers indicate that too much time is required to accomplish the allotment, there being consumed from thirty minutes to one and a half hours a day. Sometimes the entire day is spent by the teachers in preparing work that is called for only a day or two in advance of the time of meeting. It would seem that the work as developed from day to day is the proper thing to submit to the inspection of any of the directors.

HEATING.

How to heat and at the same time how to properly ventilate the schools are serious problems. With the recent addition of two new buildings in which the most modern form of heating is in use, we felt that perfection had been reached. But disappointment awaits us in all things, and this proved no exception to the rule. The air becomes so foul after the schools have been in session for an hour or so that the teachers are compelled to open the windows frequently in order to change the air in the rooms. Then the system of heating the schools in the Payne and Anthony Bowen schools seems not to give satisfaction, as it heats the upper portion of the body while the lower extremities are left cold. It is no uncommon thing to see whole schools excited and nervous because of this overheating of the head. A careful study of the heating apparatus has failed to discover any means whereby these defects may be remedied. The larger number of cases of illness arose from head colds and kindred troubles. In the Anthony Bowen School there were many absences caused among the teachers who attributed their illness to the imperfect heating of the building. Next term we shall study this problem still further and hope, with your aid, to be able to solve it satisfactorily.

Mindful of the law passed by Congress requiring instruction to be given pupils explaining the effects of alcohol upon the human system, the teachers have been diligent in that work. Desiring to find out how successful had been their efforts, an oral examination of each school was made, and the astounding fact was brought out that at least three-fourths of all the pupils were using alcohol in one or more of the following forms: Cider, beer, wine, or whisky. It is not that the teacher fails to perform her duty, but that the homes and small stores are against her. Entering a class room one afternoon immediately following the noon intermission the smell of alcohol was so noticeable that inquiry was made as to the cause, and it was found that the children were in the habit of purchasing candies known to them as whisky-balls, rock-and-rye drops, and mint julep tablets. Unless the influence which meets the parents can be enlisted, and the stores be compelled to desist from their present practice of selling these candies which cultivate the taste for alcohol, I fear that our teaching in this subject is more than counteracted.

MEETINGS.

Criticisms of meetings come from a large majority of the teachers touching the number and times of the meetings. The greater the number of special teachers the heavier falls the burden of meetings, taxing the time, patience, and strength of the already exhausted teacher. Some years ago there was an excellent practice prevalent in these schools. Meetings called for the instruction of teachers were held Saturday mornings. Should we return to this practice the special

teachers would appreciate it, because they would be able to see all the teachers of a particular grade at one time and would be saved the inconvenience of having to repeat the same instructions to many sections of the same grade at different times. Were the meetings of each special teacher confined to a period of not more than an hour, at least three different grades could be instructed each Saturday. Something of this sort must be done in order that the regular work of the grades may be accomplished by the teacher. With scarcely more than one hundred and eighty school days we can little afford to lose any of these from the class room, except in the field excursion with our pupils.

The greatest harmony should exist between the supervising force and the training school both as to matter and method, and many conferences should be held by them in which the various directors should participate. Thus only will new teachers entering the schools be prepared to receive in the right spirit and with intelligence the criticisms and suggestions of the supervisors. Each director of special work should be given a specified time for meetings, and these meetings should be confined to the presentation of plans for new work. By this arrangement time may be found for meetings, general and classified, in which the mind of the teacher is lifted above the wearisome details of school work to the contemplation of higher things, and her desire for culture satisfied by the consideration of subjects in an orderly manner.

The spirit of harmony must direct and control the whole corps if we expect unity of action on the part of the schools. Otherwise true development is impossible, and the very end for which supervision was created will be defeated.

This report would not be complete were I not to press upon your notice the absolute necessity of a school south of K and east of Four-and-a-half streets to relieve the Randall School, in which there are fifteen schools, of which ten are running on the half-day plan.

In bringing this report to its close, let me commend to your favorable notice the teachers who have been faithful to their trust under many trying circumstances.

Very respectfully,

E. W. BROWN,
Superintending Principal.

Mr. G. F. T. COOK,
Superintendent of Schools.

PRIMARY WORK.

WASHINGTON, D. C., *June 30, 1898.*

DEAR SIR: It is with no small degree of trepidation that I, the most recent acquisition to your able staff of directors, submit the following report and suggestions of the primary department of the schools under your superintendence.

Permit me at this point to gratefully acknowledge your wise and untiring counsel, and to state that it has wonderfully stimulated me in the work which lies so near my heart, and which has in you an earnest and judicious support.

It is rather mildly put to say that the field is indeed rich and productive of much lasting good. To labor exclusively with the youngest element of the teaching corps—youngest by virtue of both age and experience—as well as the youngest and crudest element of the school population, carries with it no little responsibility, but quite a deal of thoughtful and conscientious effort.

TEACHERS.

Many of the teachers considered in this report are earnest, conscientious workers, daily putting forth such efforts as must tell for good in coming years.

We have throughout the work emphasized this truth, "As the teacher so the school." My short contact has brought me face to face with this truly gratifying state of affairs. The teachers in this department are not only willing, but anxious to attain a high degree of perfection in their profession. In our regular meetings we have never failed to drive home, and, if possible, burn into the hearts of the teachers some essential facts, prominent among which are the following: The model teacher must strongly fortify herself with the spirit of the Great Teacher and try to firmly grasp something of His meaning when He said, "Suffer little children to come unto Me, and forbid them not." When this stage is reached, and only when it is reached, is the teacher able to remove her gaze from that which is purely selfish in her calling and fix it upon the grand and noble work of character building, the result of which is destined to stand not only the test which of necessity it is called upon to stand in its contact with this life, but which through the corridor of time shall be reverberated in the echoes of the purity of character destined for emulation. Precept alone does not furnish such examples, but living, breathing, noble example is that which impresses itself for good on the lives of the young and stimulates them to high and noble aspirations. Impressions are being constantly made, whether we will it or not, and these impressions are being indelibly stamped upon these sensitive little minds, to be formed into their characters. It is the incumbent duty of every teacher to see to it that the impressions she is making from day to day are high and ennobling. We are epistles being read by these little critics. Our lives are being copied; every detail of the character is being noted by these little folks and must have its effect for weal or woe. The tone, whether angry, impatient, or love-inspiring, the contemptuous toss of the head, the flash of the eye, are daily entering largely into character building

PREPARATION.

It is not only necessary that the teacher possess a kindly feeling for children, but there is much preparation necessary as well. I do not refer alone to the preparation for entering the work, but also to that preparation which is highly necessary to grace the profession. This consists of two kinds—one to fit the teacher to cope with the newest ideas and most advanced thinkers, the other to fit her to properly present from day to day the subjects in order that the child may develop both physically, morally, and mentally under her training.

Being in possession of a certificate of graduation from the best school in the land does not guarantee success in the work, and unless progress mark her every step that high order of work desired will never be secured. Would the teacher raise her calling to the dignity of a profession, she must know what she would teach, how she would teach (the capabilities of the child considered), and possess the power to cause the matter in the child's world to be assimilated into healthy mind.

HOW THE CHILD LEARNS.

The activity too frequently crushed out of the child and denounced by the teacher is the teacher's vantage ground. The world is moved by activity, and whether it is guided or not is essential to life. The infant exhibits this undeveloped life by his spasmodic starts and movements, and later on the germs of activity are so assertive that the child must relieve himself by running, skipping, screaming, or engaging in any other muscular exercise capable of wasting this nervous force. This activity is but the channel to the child's intellectual world. It is the work of the wise teacher to properly stimulate and guide this motor activity. "The child learns by doing," says Comenius. Lead him to turn this activity to account in investigating, discovering, inventing, and constructing.

LANGUAGE.

Believing that the object of all language lessons is miscarried unless it produces clear and correct expression, whether oral or written, we have labored hard to bring about ease and accuracy of expression by oral drills. The materials selected from the child's environment formed the basis of the lessons, while the child's ideas are invited, great care being taken to improve his expression. With the acquirement of new ideas are new words to express them, the object of all the work being to increase the child's ideas and give clearer conceptions; and whether the lessons to further these ends are nature study, geography, history, reading, number, or literature is a matter of small moment, since the proper development of the child is the great desideratum. When oral expression is secured, then written expression is introduced.

The science work is not given as such, but as a means to the end, the technical terms being avoided and the child's ideas expressed.

MEETINGS.

Believing that the best interest of the work is subserved by personal contact for an exchange of ideas pertaining to the work, regular meetings of all the grades have been held after or before the school sessions of the day. Plans, methods, and principles have been profitably discussed and the good results have been clearly visible on all sides. Regular weekly conferences with the model ladies and my assistant have been held in which the welfare of the work has been the topic. The benefits arising from these conferences have been far-reaching.

Five model lessons have been given at which the work as planned was practically demonstrated. I am sure every teacher returned to her schoolroom with new life.

VISITS.

Aside from planning and directing the work of the year, my assistant and I have made 1,763 visits, during which more than 250 lessons, all of which were developments, were given. The model ladies made 360 visits, many of which were for the purpose of stimulating and encouraging the weak, while at the same time the plans were pushed and the work placed on a firmer footing.

I feel I should neglect a duty were I to close my report without paying a high tribute to the ladies in my department for their kind and gracious reception of me on entering the field. Gratefully shall I ever treasure their kindness. I should like to say, too, that if earnest, conscientious work could secure for them the topmost round of the ladder, then would they have earned the position, but more research and experience is needed before the prize is theirs.

Very respectfully,

EMMA F. G. MERRITT,
Director of Primary Work.

Mr. G. F. T. COOK, *Superintendent of Schools.*

HIGH SCHOOL.

WASHINGTON, D. C., *June 30, 1898.*

DEAR SIR:

The work of the High School has been substantially along the lines pursued in previous years, the main point being to create a more intense spirit; a larger conception of this part of the system.

ATTENDANCE.

The number of pupils entering from the graded schools reached 229, slightly below the number sent the previous session. The whole number enrolled was 690, of whom 220 were boys and 470 girls. The retention of the business course at the Garnet School enabled us to work quite comfortably and successfully in the main building. The scarcity of class rooms forced two classes into the hands of a single instructor in the only study hall connected with the school. When a single teacher is compelled to look after so many pupils he can not give that individual, personal attention so necessary to inspire and hold the children in school. Consequently the withdrawals from this combination of two classes under a single teacher were large, almost unprecedented. Care and effort are needed to keep high-school pupils in school, even more than in lower grades. Boys withdraw to go to work to become wage earners; girls to share the household burdens and to assist in breadwinning for the family.

Parents do not consider enough the advantages accruing from the training beyond the elementary school, feeling that enough has been gained to enable the children to get on in the world; hence economic conditions are the cause of leaving. Moreover, pupils grow restive under the stress and push found in the high school. Coming in close contact with the brightest and best minds from all parts of the city, they begin to compare themselves with others, and the result being unfavorable they lose their grit and grip. With unawakened intelligence and weak wills and application, the first-year classes suffer most losses.

The great change from the methods of reciting in the graded schools for a few months produces many failures, and parents, unappreciative of the value of the high-school course, listen to the pleadings of pupils to be permitted to withdraw. The standard of the school should not be lowered.

The personality of the teachers must touch pupil and parent, the school must be in close and constant touch with the home. This personality should inspire with a purpose, should cause pupil to feel that he is under an obligation to do something worthy of the high privilege enjoyed.

The business course has suffered very much because of withdrawals. Doubtless the severance of relation between the great body of students and the members of this course lessened the interest of the latter and led to the great falling off in number. The absences have been almost unprecedented in the first-year classes, and there has been a lack of vim and vigor in the performance of school duties.

DISCIPLINE.

The spirit of good order and obedience has generally characterized the school, and very seldom are pupils guilty of violent infractions of

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Believing that the best interest of the work is subserved by personal contact for an exchange of ideas pertaining to the work, regular meetings of all the grades have been held after or before the school sessions of the day. Plans, methods, and principles have been profitably discussed and the good results have been clearly visible on all sides. Regular weekly conferences with the model ladies and my assistant have been held in which the welfare of the work has been the topic. The benefits arising from these conferences have been far-reaching.

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DISCIPLINE.

The spirit of good order and obedience has generally characterized the school, and very seldom are pupils guilty of violent infractions of

rules and regulations. In school "eternal vigilance is the price" of good order and discipline, and the principal should be given ample time for supervision. The regulations are few and reasonable, and have in view the proper performance of school work and the cultivation and inculcation of good habits. The aim is a manly self-control, the right because it is best. The school is but an epitome of life—is life.

BUILDINGS AND ACCOMMODATIONS.

The academic, scientific, and technical courses were taught in the main building on M street, and the business course in the Garnet School at the corner of Tenth and U streets northwest. The limited space allowed the biological department is a serious drawback to proper instruction. The increased emphasis placed upon this feature of the school requires better facilities for prosecuting the work. Biology being prescribed in the third year for normal candidates assumes an importance far beyond an elective. At present pupils are crowded into a small room once used for a conservatory for plants, and can not do a sufficient and proper kind of laboratory work.

The large number taking physics crowds the space used for laboratory purposes, making it difficult to employ the proper methods in that study. The lack of room and apparatus constitutes a most serious handicap here, as in the biology. Opportunity for suitable experimentation ought to be furnished, for science can not be successfully taught merely from the text-book.

The cramped condition of the drawing-rooms hinders the accomplishment of the amount of work demanded by the course of study. This subject is prescribed for pupils of first and second years, and for normal candidates throughout the course, and since nearly all are seeking admission to the normal school, the problem is to accommodate the large number of classes.

The occupation of a small room adjoining the drawing department on the third floor has afforded some slight relief, for here a few special classes find opportunity to pursue their studies. The construction of a plain but artistic case in the north room of the drawing department enabled the director to arrange most advantageously the materials used in his work.

The plain fact is that the growth of the school has rendered the present building inadequate, and if successful work is to be done more space must be furnished.

A fence separating the boys from the girls, and permitting the use of the back door as an entrance and exit for the boys, was put up during the summer vacation. This arrangement prevents confusion in the lower corridor, saves drafts, and materially contributes to the order and discipline. It is regretted that no walks were laid from the side gates to the street, because during wet weather it is very difficult to reach the building.

Upon the corridor floors and in a few rooms "no dusto" was used. It proved a good thing, adding a richness of appearance, saving the floors, because no mopping was requisite, thus avoiding splintering, a thing dangerous to the many feet daily treading these floors. Above all, in the absence of dust it rendered an immense service to health.

Paint outside and inside is greatly needed, and timeously applied will be economy. The present system of closets and urinals in this school, in spite of vigilance on the part of the teachers and janitor, is a serious source of annoyance and a menace to health. With the automatic flushing now in vogue water is preferable, and it is respectfully recommended that action in this be taken.

Very great damage resulted to the building from an accident which occurred during the session. Upon reaching school Thursday morning, January 20, 1898, it was found that the plastering in most of the classrooms, the basement, and first and second corridors was literally soaked with water. Investigation disclosed the fact that the feed pipes had been left open and water had flowed into the boilers all night. This influx of water produced a pressure which forced the water out of the coils, causing widespread damage. The dampness pervading the rooms and the danger from falling plastering prevented regular work for two days. The prompt action taken by Mr. Bond, superintendent of repairs, allowed the resumption of routine business after two days, although the repairs had to be carried on while school was in session. The ceilings show the ugly scars, and should be kalsomined.

Falling plastering and water damaged the pupils' desks very much. To restore them to a respectable appearance they should be scraped and revarnished. In many rooms the wainscoting was disfigured, and it ought to be oiled. The new and improved furniture put in the business school was most welcome.

INSTRUCTION.

The character of the instruction in the high school is determined by the men and women who daily break the bread of knowledge for the boys and girls gathered within its walls. The city is fortunate in having scholarly men and women in the corps, those who have had training at the foremost institutions of the land. Imbued with enthusiasm, feeling the importance of the work to be done, they have generally addressed themselves earnestly to the duties before them.

The office of such a school is to awaken higher aims, to inspire and vitalize the inert and slumbering forces of the pupil. Here he ought to get a higher development of himself, and be directed to gain and maintain the intellectual and spiritual wealth of the race. Here the minds that burn and blaze should receive an impetus to college, where they may receive the grand results of civilization and help to keep burning the eternal lamp on the altar of learning. It is no small thing in a community to have a school representing the topmost round in the

educational ladder, controlled by a body of thoroughly trained teachers, inspired by the spirit of scholarship, and above all, who can actively and sympathizingly enter into the conditions environing the pupils. The personality of the instructor is the undying thing, the "light and lightning," and the learner should leave his presence stronger, more inspired, more eager. The success of the instruction is also based upon the learner, what he knows, his age, maturity, and previous training. Lack of intelligent interest and cooperation on the part of parents is a potent factor in determining progress. The spirit shown by the majority of students is praiseworthy. Earnest, intelligent application can not be measured by marks, but the teachers have felt it, and realize that they labor not in vain. The touch between the elementary and high schools should be closer, the methods known so that there may be "one music as before, but vaster," for here should be a broader outlook, deeper interest and insight in human relations and duties.

ANCIENT LANGUAGES.

Latin is taught to all who enter the academic course—is, in fact, the training subject of that course. Its value as a disciplinary subject needs no defense at my hands. It should be taught with the special view to enrich the knowledge of English. Its study bears forcibly and directly on the everyday affairs of life, "comes home to men's bosoms and business." In this sense it is not "dead, but ever living, having put off flesh and blood and put on immortality." Familiarity with form was mainly sought in first year classes, constant hammering on declensions and conjugations characterizing the teaching. As much grammar as could be well floated was taught. The easier and more obvious constructions were taught, embracing indirect discourse, conditions, final and consecutive clauses, and the ablative absolute. Cornelius Nepos and Cæsar were studied in the second year. It is respectfully suggested that Cæsar only be studied by these classes, because the benefits coming from two texts do not justify the purchase of the books. Believing in the motto "multum non multa," not many chapters were read, but applying the "intensive" method learners gained power, erected standards, and mastered some of the difficult constructions presented.

Stress was laid upon good English with attention to the most obvious derivations. Translation from English into Latin was pursued weekly, the exercises being based upon passages read in class. All language in the beginning is imitation, and by slightly altering words, phrases, and sentences students find pleasure in this feature of their work.

The orations against Cataline, the poet Archias, and exercises in Latin prose composition constituted the ground gone over in the third-year classes. More attention was paid to grammar, enabling learners to carry grammatical rules to the facts and explain the facts by them.

Weighing and investigating words, improving the translation, and enlarging the illustration, and finally gaining familiarity with both language and matter, ever insisting on good English, was the method and aim. The utility of such training is seen in the readier grasp of the meaning of literature studied by pupils who have been thus taught. "They love more because they can appreciate better."

The fourth-year pupils in Virgil completed the first five books. In the first half, Fridays were given to Latin prose and inflections, with reviews based on the text read weekly. Some sight reading was done in the second half, after familiarity with the poet's style and the acquisition of a vocabulary.

Greek is taken by pupils who are preparing for college. The advanced class read three books of the Anabasis and three books of the Iliad. Greek prose composition was based on the text of the Anabasis and from Collar and Daniell's Prose Composition. Many passages from the first books were memorized to give a sure vocabulary and proper models.

Work in the next class included the reading of book 1 of the Anabasis, together with drill on forms and constructions. The beginners in Greek constituted a live, enthusiastic class, and accomplished an amount of work satisfactory and gratifying. The drill in form was admirable and will yield abundant fruit in the reading next year.

MODERN LANGUAGES.

German, hitherto, was the language that differentiated the scientific from the academic course, but this session French was made coordinate with German, so that pupils of the first year in taking the scientific course may choose either German or French. Having taken a language, it must be pursued for four years. No language should be taken less than two years, for no fruit can be gathered after a single year spent in such study. To gain access to the great German and French literatures should be the prime object, but to acquire a speaking acquaintance should not be rejected or neglected, and, indeed, both objects are sought here. The learner should be able to discriminate words and ideas, thus broadening the mind by revealing how other nations think. Of course grammatical construction is taught and should usually be done in English.

Beginners in German were first aided in acquiring a vocabulary, then taken into reading the Sprachbuch, attention being paid to correct pronunciation, the grammatical principles involved, and to the correct translation of passages studied. Copious exercises in oral and written translations from English into German formed a salient feature. Storm's Immensee was studied by second-year classes, the translation and construction receiving care. Hatfield's Materials furnished exercises for translating English into German. By these the idioms of the language were quite well mastered. Schiller's Der Taucher was read in part, thus offering a chance to drive home principles already touched

upon. German composition and drill on the elements of inflection and syntax constituted an important part of work done by these classes. The classes also read a portion of the Brigitta, with a view to rapid, accurate translation and the acquirement of a working vocabulary.

The ignorance of form is a very serious hindrance and emphasizes anew the need of incessant drill, varied, of course, to avoid monotony, on these fundamentals of future progress.

Freitag's Journalisten was studied in the third year, together with readings from Gore's Science Reader. German composition received attention throughout the year. Spirited discussion about the main points in these compositions helped to fix and render workable the principles taught. Power and knowledge were evidenced as the result of the efforts.

Schiller's Wilhelm Tell and Jungfrau von Orleans and Goethe's Iphigenie were read by fourth-year classes. The lives of the authors and principal characters in the plays were critically studied. Many passages were committed to memory. Weekly exercises in sight reading and German composition were given, together with a daily general review of the basic principles of grammar. Pupils showed proficiency in translation and construction, and a fair ability in sight and composition work.

A few pupils studied academic German, completing in two quarters Sheldon's Grammar, together with prose exercises. Wilhelm Tell was read through and some portions of Litteratur Geschichte.

The French studied embraced, for beginners, Livre de Lecture et de Conversation. The French language was used generally in class. Sight work and dictation occupied the last part of the session. Second-year pupils translated in Historiettes Modernes, and read for sight work part of Labiche's comedy, Le Voyage de M. Perrichon. This afforded excellent material for conversation and composition.

HISTORY.

History deals with life, and should not be a mere garnering and gathering of facts, but a development of judgment, enlargement of sympathies and interests. The question and answer method can not vivify, hence the topical method, with as much of the laboratory method as possible, should be followed. Pupils need to be directed and required to consult other than the regular text-book. Constant comparison of past and present conditions, and as much of the philosophy of history as the maturity of mind will admit, must be found here. A very slim collection of history books exists here, and good, abiding results can come only from ample means of teaching. An impulse, an inspiration, ought to be the outcome of this study that the learner will not willingly let die. For two quarters first-year pupils studied Myer's Eastern Nations and Greece, employing the remaining time on Allen's History of the Roman People. Pupils were assigned

topics to be developed in their own manner, and needed points brought out by discussion in class.

For two quarters second-year classes studied English history, covering ground from the early invasions and settlements to the Stuarts. It would be well if the period of greatest achievements and extension could be studied, because the influences at work in England have shaped the beginnings of our own history.

French history was traced from its beginning to the present. Geography was called in to illuminate. The early life and institutions of the Gauls, the Roman Conquest, the inroads of the Germanic tribes, the Middle Ages, the foundations of modern Europe, and modern France in its relation to the rest of Europe, were the main topics handled. The interest was sustained and great good resulted from the study. The laboratory method was followed, the papers prepared evidencing much research and careful thought.

In American history Johnston's American Politics was used as an outline from the Constitution to Reconstruction. Original research, involving the use of the Congressional and city libraries, was required. At first the topics for special readings were given to all. Later, topics were distributed to individuals to specialize and bring back a complete account of its development and influence. For example, tariff legislation, and the banks of the United States were traced through the time covered by the study. Here they studied cause and effect, gathering materials for analysis and estimate of human character, men and measures, and from data so stored generalizations were made. Some time during the fourth quarter was spent on political economy, the introduction and one book of Ely's treatise being taken.

SCIENCE.

Habits of close observation and independent investigation must be inculcated by the exercises. Here the learner must think for himself, draw his own conclusion from his own observations. The instruction should tend to create the scientific mind, a mind that pays just and due homage to the authority of facts. There is always danger of intellectual leaning in large classes, and the constant vigilance of the instructor is requisite to prevent it. The prominence put upon nature work in the lower grades renders the laboratories of science here very important, especially since the teachers of the schools are trained here. The department of biology should become the Mecca of teachers and pupils, to see what has been and can be done. It should furnish a splendid object lesson in the proper collection, preservation, arrangement, and classification of materials. Books necessary to the work ought to be at hand in the laboratory. All this is hindered by lack of space and funds. Happily we are in the nation's capital, where science spreads her trophies at our feet. The museums are vast aggregations of object lessons, and an hour in them gives the fruit of years else-

where. In connection with work in school, topics assigned may be worked up by visits, and splendid papers written. The pupils must see, think, compare of themselves, by themselves, for themselves, from real things.

The classes have pursued the course laid down in the manual—dissecting specimens, visiting the fields and markets, and making collections that reflect great credit upon their interest and zeal. An incubator enabled them to trace the development of the chick through various stages.

In botany a complete study was made of the development and growth of the plant from the seed, with a minute examination of its parts and modifications. The microscope revealed the structure. Spring enabled the pupils to investigate herbaceous plants, trees, and shrubs, including a study of relation, classification, fertilization, and economic value. The Botanic Garden afforded an opportunity to study plant life. Essays were prepared on interesting groups found there. Excursions in the fields formed a feature not the least interesting and profitable.

Performing and recording many experiments in chemistry were prominent aspects of the work. The metals and nonmetals were studied and investigated in the laboratory. Oral and written tests were frequent. The more advanced courses comprised qualitative and quantitative determinations, including water and milk analysis.

Classes in physics used Gage's Introduction to Physical Science, the second-year classes going as far as electricity. Sound, electricity and light, photography, and meteorology were studied by pupils of the third year. In the fourth, Thompson's Elements of Electricity and Magnetism was used, the text being supplemented by matter from other books. Photoengraving and bell and electric-light circuit running received some time. As stated in the beginning, the large number taking this study produces a congested condition in the laboratory, making it difficult to carry experimentation to its proper extent. This branch, like many others, suffers for the want of an adequate supply of apparatus. Could a sufficient sum of money be set apart for the purchase of permanent scientific apparatus for the science departments the enrichment of the pupil through individual work would amply justify and repay the expenditure. The engine used to run the dynamo is not in good condition, and should be either repaired or, better, replaced by a new and improved one. Sheet lead is needed in the vicinity of the sinks and electrotyping bath to prevent acids from destroying the woodwork.

ENGLISH LANGUAGE AND LITERATURE.

By far the most important problem in high-school instruction is the proper landing of the vehicle of thought. The mastery of every-day spoken and written English is an object worthy of the best thought and energy of all those who are charged with the tuition of pupils in this and all branches in the curriculum. Here the teacher should have

wide and deep knowledge supplemented by large experience. As he who would be free must himself strike the blow, so he who would teach English must himself know how to talk it, how to write it, how to criticise the efforts of those who are mastering it. Cleanness of thought and clearness and correctness of expression are the desiderata. Proper ideals must be established, and suitable standards erected in the mind to guide and inspire. Power and skill come through constant discussion in the class where the teacher holds all to a firm and clear grasp of the topic. Clear thinking usually means clear expression, and semi-perceptions are revealed by dark, confused, and ambiguous language.

English should enter every study pursued in the high school. A pupil must be made to feel that he is responsible not only for the facts, be they scientific or mathematic, but also for their proper expression. To do this is as much a duty of the teacher of science as the inculcation of the data of the subject. The instructor, whether he be a specialist or not, fails to do his whole duty by the learner unless he trains along all legitimate lines, and, of a truth, English, the vehicle of thought, deserves and demands time and attention enough to enable the student to use it decently well.

The science of mathematics is exact and requires exact language, and it is only asking for what truly appertains to the subject when concise, clear, complete expression is demanded. He who does less than this fails, and fails vitally. Physics and chemistry are also exact sciences and must be taught with a view to exactness of language, pointed, definite expression.

Patient experiment, accurate observation, and logical conclusion, couched in good, clear, idiomatic English, are the aims. If a technical term is needed it must be at hand and rightly employed. In no other way can the scientific mind be formed.

Finical, hairsplitting distinctions are not in place here, but ordinary violations of good usage should be looked after and corrected in the nick of time, just when the receptive state of the mind will be best profited.

To be on the qui vive while in the English classes and permit the laissez faire spirit in others results in a woeful waste of time and talent.

English, then, first, last, and always, not obtrusively in other than specific English subjects, but sufficiently to feel the uplift that comes from daily growth and strength in the language—an uplift that shall enable the learner to cooperate fully with his fellows in preserving and carrying forward the priceless inheritance of the age and country.

First-year pupils in the academic and scientific courses studied, in the first quarter, the sentence grammatically and rhetorically. The paragraph was also examined, while stress was being put on description. Macaulay's Warren Hastings formed the text for study. Topical outlines were insisted on during the pursuit of the subject. In the second quarter the work was continued and emphasis laid upon narra-

tion. The classes took up Dickens's Old Curiosity Shop. The different parts of the story were outlined and both oral and written exercises were given upon them. Considerable original narration, oral and written, was required.

Tennyson's Idylls of the King constituted the subject-matter for work during the third quarter, stress being laid on description and word study. Exposition received attention in the fourth quarter, while the pupils in class read the Ancient Mariner and the Prisoner of Chillon. Some poems by contemporaries of Coleridge and Byron were read.

The general criticism may be summed up by saying that pupils on reaching the High School evidenced lack of practice in talking and writing in a connected, logical manner. English is not a tool well in hand, their habits of expression being crude and unformed.

The first-year business pupils followed substantially the same line of work as the first year academic and scientific, but with less satisfactory outcome. The written work here was not what one ought to find in the High School. Some improvement was noticed at the end. Perhaps the character of the subjects studied might be altered with profit to the members of this course.

The Merchant of Venice was pursued by the second-year sections four hours a week for one-half of the session. To enable the pupil to grasp the thought and appreciate the beauties of the author, special attention was given to words, structure of sentences, and figures. Frequent written exercises on the stories and characters of the play were required. The commoner principles of rhetoric were examined in connection with the work. Believing in the efficacy of memorized passages in cultivating the taste for the best in literature, classes were made to learn and repeat many excerpts.

Second-year students in the business department also studied the same Shakesperian play, and also Burke on Conciliation. The language here was quite beyond the average pupil, and the trend and amplitude of the great statesman's reasoning called for strenuous effort. Diligent study enabled them to grasp some of the thought and to store the mind with many sententious sayings of the author. Formal and informal notes, letter-writing, and business forms were the matter used in written exercises.

Milton's minor poems, Books I and II of Paradise Lost, Hamlet, and Macbeth were studied by third-year classes. Much written work on the text was had. Here, too, choice portions were stored in the memory. The lives of the authors and their contemporaries received attention.

Fourth-year classes, after a general review of English literature as a whole and frequent lectures on critical analysis of prose and poetry, with especial attention to paragraph structure and its development into the theme, read and reviewed the following works of the nineteenth-century authors: Wordsworth's Selected Poems, Macaulay's Addison,

Tennyson's Princess, and George Eliot's Silas Marner. Themes on characters and authors were prepared, read, and criticised. Lectures were given on eighteenth-century literature and also on the rise and development of English fiction. Oral expression in the daily recitation received constant care. Too much stress can not be laid upon both oral and written expression. The oral should not be sacrificed to the written, as it is the basis and preparation for written discourse. Oral expression makes it possible to put written thoughts in clear, terse, vigorous English. Training in English should fit the pupil to choose wisely his own reading. To this end some books should be selected for home reading and an account of such reading called for.

MATHEMATICS.

This study in any scheme of education must ever hold a high position for the impression it makes upon the intellect. A logical, reasonable, steady, and accurate mind is the fruit of its discipline. Under its touch the mental vision is clarified and false and partial views banished. Properly taught, it may cease to be a stumbling block and to many be "a joy forever."

In algebra the effort to have pupils master the equation was kept ever in view. Principles were constantly hammered on. Original work, particularly in problems, was required, thus helping the learner to grasp the conditions involved. Accuracy, the essential in mathematical training, was kept constantly in mind. Only by so doing can the mind be led to appreciate and seek truth in all things. Geometry, taught in second-year classes, included the completion of the first five books in plane and solid geometry. Original work received a goodly share of time. The size of the classes in this subject made it difficult to secure the best results, and many failures occurred. A high order of work was done by pupils in the third year, solid geometry, conic sections, and plane trigonometry being finished. The class in analytic geometry passed over seven chapters of the book, and reviewed trigonometric formulas with the third-year class. Could the instruments for the prosecution of surveying be furnished, doubtless many would be thereby induced to take up that valuable and practical branch of mathematics.

Arithmetic in the first-year business classes embraced a rapid running review of decimals preparatory to taking up the great subject of percentage and its applications. Profit and loss and commission then were taken up, and the rest of the first quarter spent on them. Many tests were given in the second quarter on the preceding quarter's work, insurance, taxes, discount, and interest being studied. Pupils were quite thoroughly grounded in interest during the third quarter. Partial payments was quite thoroughly mastered. Accuracy, neatness, and rapidity were never lost sight of.

Work in the second-year business class put stress upon the ready

and business-like solution of work. Much stress was placed on mental work, thus enabling pupils to concentrate the attention on the main point, the numbers being not too large to obscure the principle involved. Quite satisfactory progress was made.

DRAWING.

Drawing is prescribed for all first and second year classes, and for all normal candidates throughout the high-school course. Seventeen regular classes were taught. First-year pupils took geometrical and object drawing from natural and artificial models. Color was used in the course of this instruction. Work similar but of higher character constituted the course of the second-year classes. Third-year students studied from nature, leaves, plants, flowers, and fruits. This work created interest in observing form and color, cultivated the æsthetic sense, and was a very material aid in the pursuit of botany. Insects, stuffed birds, and animals, in addition to some work of the preceding year, were drawn and colored by the seniors. Sign drawing and painting, picture-frame drawing and carving, and painting and drawing from various objects were also taught. The practical and useful element here makes this department most valuable and important. The energy and artistic taste and skill of the director are worthy of the highest praise. The interest and enthusiasm of pupils were unflagging.

MUSIC.

From September to January six classes were taught one hour each, weekly. A reorganization of the music department in the schools at the beginning of the new year permitted the giving of more time to this study for the remainder of the session. The teaching aimed to strengthen and develop the lungs and vocal organs through proper exercises in breathing and vocalization. Sight reading and tone work received care. All the forms of the minor scales, triads, and the doctrine of intervals were taken up. The concert singing by the school, as a whole, was excellent. The book used was the Beacon Song Collections, and the selections rendered by the pupils were of a high, classical order. More individual work was done, defects and blemishes corrected and removed by the personal work of the instructor upon each. In the past, when forced through lack of time to mass so many, the individual was lost, and this subject added but little to the equipment of the pupils. Under the new order this feature of the school should train the learner, ennoble and sweeten this life.

MANUAL TRAINING.

The technical course laid down in the curriculum has in view the offering of opportunity to the boys in the High School to acquire a better knowledge and more skill in the use of tools and machinery than

they have hitherto gained. The distance of the shops from the high school and the inadequate and poor plant have had a deterrent effect, and but few have entered the technical course. Again, it has been extremely difficult, under the circumstances, to so arrange the hours as to permit the pupils to pursue the work in the shops and the work of the text-books in the main school.

The value and utility of this training are unquestioned, but it should not overshadow the value of that conventional and disciplinary training which the wisdom of the ages has decided to be the best for each and every one, no matter what he may be called upon to do in life. The boys who could get to the shops spent their time in working in wood and iron. Five, as the fruit of instruction in the machine shop, have gained steam engineer's licenses.

A large number of girls entered the cooking school to continue the training gained before reaching the high school. Were the facilities nearer, many more would avail themselves of the advantages offered in this department. The girls are forced to travel nearly a mile to reach the kitchen, and in inclement weather it works a hardship. The course, in addition to the practical and fancy cookery, embraced a study of all varieties of food as to composition and the just and proper combinations. The digestion of food was discussed, and the value and importance of domestic science impressed upon their minds.

PHYSICAL TRAINING.

Nineteen sections of girls were given one lesson each a week, and the pupils were required to practice five minutes daily under a class leader. The general work included a series of movements calculated to bring every muscle into action. Wand and dumb-bell movements, with some club swinging, were given. Special breathing exercises were also a part of the year's work. Marching was taught with a view to discipline and good carriage. The need of simple and inexpensive apparatus is felt, for through that the benefits to be gained from this feature of school work will be greatly enhanced and extended.

BUSINESS STUDIES.

BOOKKEEPING.

Business students pursue this subject two full years. In the first year the double-entry system is taught, five hours per week being spent on it. While unfolding the fundamental principles of double entry, single entry was explained. Eight sets of the text-book were completed. The business paper involved in every set was thoroughly made out by the pupils. Bookkeeping in the advanced classes consisted in writing up the sets in the text-book, with constant stress on the fundamental principles. Many problems were solved and business papers fully and carefully treated. Business practice, notwithstanding the

absence of facilities calculated to add interest and reality, was quite creditably done. A bank and a commercial exchange were in operation, thus enabling pupils to gain practice and familiarity in the routine of actual business matters. Such measures take teaching from the region of theory and make it most interestingly real and businesslike. The needs of this branch are pressing. The course is very short, and no means or facilities should be wanting to render it most effective in giving students the best possible training. A countingroom provided with desks for pupils and equipment for the bank and officers should be arranged. Here, under most favorable and businesslike conditions, the bookkeeping pupils might assemble from various rooms for recitation. The completest and best preparation by the quickest and shortest route is imperatively demanded if this course is to hold its place among the educational factors of the day. A bank and office stationery should be furnished. Through the efforts of the instructors forms wholly inadequate have been purchased, but new and better ones are needed for future work. To render learners familiar with the routine of regular business as pursued to-day, we should offer in the school a wholesale office, a real estate office, and an insurance office.

COMMERCIAL LAW.

Four hours a week for half the year the senior pupils studied commercial law. The work covered contracts, commercial papers, agency, sales, and stoppage in transitu. The importance of commercial papers called for most of the time. The principles involved were thoroughly examined, the interest in working up cases illustrative of the principles never waning.

HISTORY OF COMMERCE.

The last half of the year was occupied in the study of the history of commerce. The text-book is very comprehensive, covering ancient, mediæval, and modern commerce. The present commercial policy and relations of each country with all others were examined, commerce of our own country being especially emphasized. Collateral helps were found in pamphlets from the Bureau of Statistics of the State Department. Commercial journals were at hand to show the trend of present commercial policies. As an aid to this subject, commercial geography was taught.

PENMANSHIP AND SPELLING.

The first twenty minutes every morning were devoted to penmanship. The value of a good business hand can not be overestimated, and strenuous effort is demanded to overcome some of the faults found to exist. Attention is requisite all along the line, for what avail to hammer on penmanship in penmanship hour and accept poor work at other times? For very poor writers the vertical system seems to be

most helpful in acquiring legibility. Spelling was taught regularly by spelling oft-recurring words in business transactions and lists made up from the English.

SHORTHAND.

First year, for first and second quarters and a part of the third, gave attention to the fundamental principles set forth in the manual. Supplementary matter designed to illustrate and impress what had been taught was presented. The remainder of the year was devoted to business letters, which, after having been written many times in shorthand, were executed from dictation. The number of scholars selecting shorthand in the senior year was few. The work is hindered by a lack of a knowledge of our language. Dictation of the simplest work in words of one syllable was taught, then easy letters with simple phrasing, and finally more difficult matter, with some time in taking testimony. The time is altogether too limited to secure really good results here, for constant practice is absolutely necessary for reasonable progress.

TYPEWRITING.

Fingering, copying, manifolding, and dictation constitute the main work for beginners. Due stress was put upon the care of the machine. The increase in the number of the machines was a very great gain, and the good results appeared in added power and skill. Accuracy, neatness, and speed were sought in the second-year class. The work done evidences good training, but the lack of a ready command of English is a barrier to the accomplishment of work fully worthy at this stage of school life.

MILITARY.

This element in the course is a most potent factor in securing good order and discipline among the young men. It creates habits of promptitude, order, subordination. It fosters self-reliance and force of personal character by casting each, whatever his antecedent circumstances, on his own individual responsibility. The military organization includes a battalion of three companies, and the manual for instruction is the same as prescribed for the infantry arm of the Regular Army. The instruction and exercises do not interfere with regular book work, but rather prepares for healthful and successful mental effort. The plan of selecting officers is an incentive to scholarship, 75 per cent of the rating for the battalion promotion being based on the record made in school work. Special attention was given during the first quarter to squad drill and "setting up" exercises, this latter exercise receiving emphasis throughout the year. Stooping forms are made erect, round shoulders squared, narrow chests expanded, and the whole bearing made more manly and graceful. Company and battalion work, including foot movements, the manual of arms, dress parade, and loading and firing have consumed the greater part of the limited time allotted to

this branch. It is to be remembered that a part of but two days in each week is given for training the boys.

The battalion, headed by the Capital City Band, paraded the principal streets on Washington's Birthday. It was reviewed by Gen. George H. Harries, Col. Charles H. Heyl, and Mr. Thomas H. Wright, trustee. The annual competitive company drill, inaugurated last session, took place at the National Base Ball Park May 27, 1898. On this occasion the "Teachers' medal," the gift of the teachers of the city schools of the Ninth, Tenth, and Eleventh divisions, and of the Seventh and Eighth of the county, was competed for, and won by Company C under Capt. Joseph O. Montgomery. That the military feature of the school is giving the young men public spirit and patriotism is evidenced by the fact that the best officers for the local militia are its graduates, and that in the selection of competent officers for the Cuban war by the War Department three of the five chosen from this city had received their military training in the High School.

LIBRARY.

"He is wise who knows who has written and where to find it," and for the immature student, how to find information becomes important.

Individual power springs from superintending and stimulating the learners to make investigations in the fields of literature, science, and art. The school should implant more than the mere desire to use the text-book. A goodly collection of the best books will be the motive and means of cultivating and stimulating the pupil to push his researches. A good librarian becomes almost as essential as a good teacher; in fact, he is a most valuable teacher in such a school, for he is the head of this, the intellectual laboratory of the whole school. The library must contain a supply of reference books and the bibliography of the most important subjects. The small sums appropriated to the library have left it ill-fitted to play its part in the intellectual development of the learner. The munificent amounts realized from the concert and drill will enable us to add many useful volumes to this part of the educational machinery. A few of the most important magazines and at least a daily paper should be found among the attractions of the library, that current events may not lose their force and teaching.

RHETORICALS.

Believing in the efficacy and value of rhetorical training, pupils spent the first period in every week on Friday in class-room exercises. Here essays, recitations, declamations, and debates were made prominent. The aim was to get the pupil to use correct and refined English. An attempt was made to grade the work, the first-year classes seeking acquaintance with American authors. Numerous quotations were required from various poems.

The following is the outline followed in the first year:

ESSAYS.

1. Life of Longfellow. 2. Writings of Longfellow. 3. Longfellow's Home Life. 4. Reproduction of Paul Revere's Ride, (*b*) The Sicilian's Tale, (*c*) King Robert of Sicily, (*d*) The Theologian's Tale, (*e*) The Legend Beautiful, (*f*) Brief Abstracts of Evangeline and the Courtship of Miles Standish.

FOR RECITATION OR READING.

Footsteps of Angels, Ladder of St. Augustine, The Building of the Ship, The Children's Hour, Wreck of the *Hesperus*, The Reapers and the Flowers, The Builders, The Bridge, The Famine (Hiawatha), The Light of Stars, The Secrets of the Sea, Christmas Bells, Sandolphon, The Falcon of Sir Frederigo, The Village Blacksmith, Legend from Morituri Salutamus, Legend from Evangeline, Resignation, Killed at the Ford, The White Man's Foot (Hiawatha), Paul Revere's Ride, The Fiftieth Birthday of Agassiz.

COMMITTED TO MEMORY BY CLASS.

Psalm of Life, The Rainy Day, The Builders, The Day is Done.

The second-year classes as well as the third pursued the work in a similar way, but brought in matter from a greater number of authors. The object was the interpretation of thought by oral expression. They read Hamlet to the Players, Hamlet's Soliloquy, Eternal Goodness, Selections from Snow Bound. They declaimed and recited Webster to the Veterans of the Battle of Bunker Hill, Burke's Speech at the Impeachment of Hastings, Phillips's Toussaint L'Ouverture, Phillips's Burial of John Brown, Extract from Douglass's Rochester Speech, Lincoln at Gettysburg, Brutus's Address to the Romans, Mark Antony's Address to the Romans, Portia's Speech, The River Path, Thanatopsis. Here an opportunity was afforded to correct faults of enunciation and pronunciation, to attend to deficiencies in early training, both in speech and expression. Fourth-year classes, in addition to class-room rhetoricals, were required to furnish monthly public exercises in the assembly hall before the whole school. More original work was exacted as the students advanced. Some of the essays and orations showed good talent, patient study, and research. These rhetoricals were greatly appreciated by all, many parents and patrons of the school being present.

CONCERT AND ENTERTAINMENTS.

During the session several entertainments were given to raise money for various ends. A Thanksgiving luncheon was prepared by the fourth-year classes to aid the library fund, and one by the biology pupils to purchase materials for their work. A phonograph entertainment was presented by the teacher and scholars in section A4 to secure

decorations for class room 17. As the fruit of that entertainment figures of Jupiter, Minerva, Diana, and Virgil adorn that room, and add interest and reality to the study of Rome's sweetest singer. On April 6, 1898, a novel entertainment, "The Chronothanatoletron," or Time and Space Annihilator, an electrical device, the work of the genius of the nineteenth century, by which the great women of all ages can be brought again to earth, was given by the young ladies of B4 (scientfic). The Hobo-Zobo Club, composed of the young men, rendered an original and delightful musical melange. The sum of $53.91 was realized from this. The busts of Goethe, Schiller, and the Apollo Belvedere, with two photogravures illustrating the Niebelungen cycle of German literature, grace the walls of class room 11. The final entertainment was presented by the Latin pupils of A4 and C4, and was a most enjoyable occasion. This was arranged by the teacher. The principal characters in the immortal Æneid seemed to move and act again upon the stage of life.

On May 20, 1898, the school gave a concert, which netted a good sum for the purchase of library books.

OCCASIONAL ADDRESSES.

In the course of the year the school was favored by addresses from prominent individuals. In the larger relations of geography and government the school has had valuable assistance. On the occasion of the celebration of Washington's birthday, February 21, 1898, Dr. W. A. Croffut, introduced by Hon. Blanche K. Bruce, delivered the chief address, which consisted in part of the narratives of the lives of other men as a background and soil for a strong characterization of Washington. The speech was practical and inspiring, emphasizing the qualities that made Washington noted. The speaker's allusion and tribute to Old Glory were most eloquent. Messrs. Buckley and Russell, the former a fine xylophonist, the latter a skillful guitarist, gave musical selections. The school presented several patriotic songs and Washington's Rules of Behavior. On March 2, 1898, Mr. Samuel W. Nichols, through the kindness of Dr. Croffut, appeared before the school in a lecture on "Alaska and its destiny." His humorous and rapid narration proved most acceptable. His description was assisted by maps from the Coast Survey, portraying the Alexandria Archipelago on a large scale, and giving an outline of the vast Yukon district. The lecture gave a graphic picture of the great sea of islands through which the gold regions are approached, of the dark and dense evergreen forests, the tremendous solitudes, the bleak and perilous mountain passes over the Cascades, the glaciers unparalleled in size, the short summers of sudden luxuriance and florescence, the long winters of imprisoned silence, the few natives and their scant fishing tackle and precarious means of subsistence, the lack of government and order, and the need of immediate legislation to protect the law-abiding against

the lawless. May 9, 1898, "Cuba and the Philippines" was the subject of a lecture by Dr. Croffut. He passed in rapid review the salient points of the current war with Spain, and gave the offhand story of his trip to Cuba. He described somewhat minutely Havana, its harbor and fortifications, its people, their dress, boats, volantes, and habits. The word painting of the speaker was marvelous. To this he added a description of the Philippines, especially Luzon and its great commercial emporium, Manila.

Hon. John T. Green spoke to the school on "A trip to England," and his talk was pleasing and profitable. The burst of eloquence at the close electrified the audience. Douglass Day, February 14, 1898, was appropriately celebrated by exercises, such as singing by the school and a very eloquent and pleasing address by Dr. Charles B. Purvis.

Flag Day, June 14, 1898, was observed by the High School in singing patriotic songs and in listening to an address by Captain Blodgett, of the Bureau of Education. Early in the year Mr. J. H. Hill and Prof. J. D. Baltimore, from the industrial department, appeared and addressed boys on the value and bearing of industrial education and training. They showed that many calls are sent to those who are ready; that hand work does not imply lack of intellect, but that the trained head and hand are winning factors in the battle of life. Miss Laura F. Barney, assistant principal, in a special talk to the girls in October emphasized the things necessary to protect against inclement weather and showed how cheaply the requisite articles might be secured. She also enlarged upon the value of attending to health by looking after food, bathing, and sleep. Another timely and useful talk to the young ladies was given by Miss C. E. Parke, instructor in the school. Miss Parke especially dealt on cleanliness, showing its influence on health, on personal attractiveness, and on the moral make-up. These "bosom" talks to girls by women are very helpful, and it is the policy to extend them, for it is not all of education to master the things in text-books. The principal has followed the practice, for a few minutes after prayers two or three times each week, of touching upon matters of conduct, of health, and of the duties and relations of life.

GRADUATION.

On June 22, 1898, the graduation exercises took place in the Academy of Music. One hundred and three pupils received diplomas.

CONCLUSION.

Permit me to say, in closing, that the work, although not entirely satisfactory, is being done by the teachers with earnestness and a full appreciation of the responsibility imposed.

Very respectfully,

W. S. MONTGOMERY, *Principal.*

Mr. G. F. T. COOK,
Superintendent of Schools.

NORMAL SCHOOL.

WASHINGTON, D. C., *June 30, 1898.*

DEAR SIR: I have the honor to submit the following report of the Normal School of the ninth, tenth, and eleventh divisions for the year ending June 30, 1898:

In the Normal School proper the enrollment of second-year pupils, 30; first-year pupils, 26; percentage of attendance, 99.3; number of visitors, 255; training schools, 3 of each grade, from first through third, average number enrolled, 320; average daily attendance, 285; number of teachers, 6, including principal.

In October the entire building was turned over to us, which necessitated a complete reorganization of the entire school. The training schools, 9 in number, were given over entirely to senior students for practice in management and teaching, each of the 3 grades supervised by a training teacher whose business was to assist in every way the pupil-teacher, and at the same time to observe closely the children in order not to permit any loss to them. This double duty required unusual vigilance, keen intelligence, and wise judgment on the part of each training teacher.

The experience of the year, however, suggests to me the propriety of making some recommendations as to special qualification for training teachers. These may be considered under two heads: Scholarship—exact knowledge of subject-matter to be taught and its correlates; growth—progression in new subjects.

We are beginning to recognize the fact that without travel, observation, and experience no amount of mere reading can make an educated man or woman. We need the educated woman—the thinking woman. With every form of organized life, except man, to think is to do. As a consequence, much of our thinking is fruitless, and much of our doing is thoughtless. Distinctness of aim, grasp of general methods of subjects, grasp of principles of instruction, then methods of teaching will follow which will express individuality and be suited to the individualities of the pupils.

Personal requisites: Good health; habits of strict integrity; cheerfulness; good humor; knowledge of human nature gained by careful, systematic observation; intellectual honesty; no prejudices in favor of one study to the detriment of another; thorough interest in humanity; thorough interest in all studies; thorough interest in culture; self-control; complete self-poise; comprehensive attention; good manners; courteous, gentle, cheerful; a well-modulated voice, sweet and low, with distinct utterance; sympathy, which gives patience; ability to draw, to sing, and to write well; last, but not least, a well-defined æsthetic taste. These are essential characteristics in all teachers, but are absolutely essential in the teacher of a normal school where personality is alone the governing and inspiring agent.

Now that the course extends over two years, we are able to do much more effectively our work, and hope for much better results.

The first year is devoted to bringing the students into intellectual harmony, no practice being allowed in training schools save to illustrate a principle of instruction.

The second year is one of practice. The entire class is distributed among the nine schools, where they teach continuously for ten weeks; then first-grade pupil-teachers pass to the second, and the second to the third, and the third to the first. Each pupil teaches and has practice in management the entire year and in each of the first three grades. One hour daily at the close of school is devoted to criticism and to the outlining of next day's work. These lessons are conducted by the training teacher in charge of the grade, assisted as often as possible by the principal. Originality is always commended, provided psychological reasons can be assigned.

The scholastic standing of normal pupils is determined by written examinations at the end of each quarter; the ability to teach, by the combined judgment of entire teaching corps in Normal School.

When we consider that these pupils are to receive both theoretical and practical preparation for their life work, it must be confessed that neither the time at our command nor the acquirements of the pupils are sufficient to give them the thorough and substantial training we desire.

We wish, further, to suggest that there be a change in the manner of admission to our schools: Either depend wholly upon high-school standing or wholly upon a good, sound, English examination. We greatly prefer the latter, and feel quite certain that if it be adopted not only better results would be obtained along professional lines but greater satisfaction could be given to parents and friends.

This year we have been cramped for want of room. We hereby recommend that for another year a larger building, preferably Miner, be secured; and in fitting it up please bear in mind the value of proper hygienic arrangements. We earnestly plead for a gymnasium, a reading room, a retiring room for normal pupils as well as teachers.

Unquestionably for the teacher, as for members of any other profession, the reading of scientific and special works which bear directly on his specialty are an excellent means for improvement. As our pupil-teachers are too poor to purchase for their private use the numerous books, papers, and magazines relating to public-school teaching, we urge upon you the immediate necessity of supplying us liberally with the same.

We have always recognized the force and thoroughly believed in the great need of a closer union between home and school. There must be a certain spirit of good will between parent and teacher in order that the teacher may breathe into the child a spirit of humanity and call into vigorous activity his mind, so that he may become "the discoverer

of truth, the interpreter of nature, the framer of science." With this end in view, we have held parents' meetings quarterly, and we already feel the beneficial results. Our attendance has greatly improved; the children come to school cleaner in person, more neatly dressed, more studious and polite.

From time to time we have had lectures by eminent men and women, which have been very helpful. We owe a great debt to Commissioner Harris, of the Bureau of Education, who has helped us so much by giving the freedom of his library to our pupils. A course of lectures by Prof. A. F. Craven, of Columbian University, on psychology has been exceedingly beneficial, not alone to pupils but to teachers. We are very grateful to him. Another year we hope, with your assistance, to inaugurate a systematic course of lectures by eminent educators.

There has been but one dark spot above our horizon this year, and that was caused by the passing of Burrell Jefferson, a model student of the class of '98, into eternal rest. We sincerely mourn his loss.

We thank you, Mr. Superintendent, and the board of trustees for your uniform courtesy.

With great respect, yours, truly,

LUCY E. MOTEN, *Principal.*

Mr. G. F. T. COOK,
Superintendent of Schools.

MUSIC.

WASHINGTON, D. C., *June 30, 1898.*

DEAR SIR: I take great pleasure in reporting to you that the music work under my direction has been performed by the teachers of the schools to my satisfaction. By means of teachers' classes, by special lessons to schools in the presence of teachers, by personally conducting a music lesson in each teacher's school, and also by weekly classes at my residence, defects have been largely remedied and the knowledge of many of the teachers increased both as to the subject itself and the methods of its presentation.

Few teachers have made a special study of music, and fewer still have thought of taking the present advanced ideas of child teaching into their music work. Many had been taught to regard the music as merely a recreation and had no enthusiasm for its more serious consideration. I have endeavored, with some success, to have them appreciate the disciplinary value of music study, and have sought to point out the manner in which it acts as a mental stimulus and a direct aid to what are considered the more important subjects of study. Superintendent Alfred Kirk says it "is as necessary as the three R's." Superintendent Nightingale writes: "As a mental factor, a physiological force, it is as important a part of school life as reading, writing, and

arithmetic." Superintendent Lane considers it one of the very important elements in a child's education. Principal Charles W. French speaks of its broadening and liberalizing power in education. Dr. Lindner, in his Cyclopædia of Education, mentions its disciplinary and concentrative powers. The ancient Greeks and Romans looked upon it as one of the chief pillars of a liberal education. When the regular teacher has formed some idea of the dignity, the importance, the utility of music as a factor in mental development and in character building, the problem of our public-school music will be solved.

Nothing had been attempted along the line of real voice training, and at first I met with considerable opposition from the teachers when attempting such work with their small children. In vocal music it is of the first importance to obtain a clear, smooth, flowing tone; all else is secondary. Most children have fairly good habits of breathing and of vocal utterance, and these we wish to preserve or, if abnormal tendencies have begun to appear, to restore. This training, therefore, can not begin too early in any schools, and more especially in ours. Our pupils are largely the children of the poor, and have continually before them, in the narrow courts and alleys that are their playgrounds, the husky cries of the hucksters, the nasal, throaty voices of street singers, the guttural croaks of many of their own parents. Only by early and unremitting care during school hours can the evil results of such examples be overcome. The majority of the teachers now acquiesce in this view. Again, vocal exercise expands the lungs, enlarges the chest, increases the circulation, and, in short, acts most beneficially upon the whole body—another reason for its early introduction and daily practice. Physical culture is engaging the attention of the best educators of the day. Since our voices are part of our physical natures, it has not been difficult to show that the child's voice may be cultivated by simple exercises to be used as a sort of vocal tonic or breathing gymnastic, and that the child's pliant body will grow to fit his beautiful voice, which is the result of correct breathing methods—the corner stone of health. Many of the teachers who have regularly and systematically taken these exercises, though for only a few months, have testified to the beneficial effects upon the general health. During the weeks of examination it was most gratifying to note the gain in lung capacity and control of vocal organs displayed by the pupils. The tone was almost uniformly improved and of sweeter and purer quality.

Another feature to which I wish to call your attention is the successful treatment of monotones—tone-blind children who could imitate no given vocal sound, and had no control over their singing voice. In January, 1897, there were in our first and second grades alone 300 monotones; on the 15th of June, 1897, all but about a score of these had been taught to sing, and probably only a dozen were yet tuneless.

I wish also to call your attention to a general improvement in the ability to give sustained attention. In this many of the teachers have

found the music correlate most helpfully with other studies. I have pointed out to them how music study strengthens the child's powers of perception, of observation, of comparison; how it is unequaled in the training of the eye and ear, in the cultivation of the imagination, in the development of the will, in the enlargement of the powers of thought; all of which are of specific assistance in every other schoolroom exercise.

The æsthetic side of the child has been reached by rote songs which, as nearly as possible, followed the line of the school work. Careful attention has been given to position while singing, to quality of tone, to pronunciation, enunciation, phrasing, and expression. No songs have been sung whose content had not been thoroughly studied and previously explained. The rote song is such an important factor in awakening the sensibilities of our children, in "reaching the very wellsprings of their conduct" by inculcating subtle and lasting sentiments of morality and patriotism, that it is my purpose to introduce them to the higher grades as rapidly as good selections can be made. I think they may prove a means also of interesting the parents in our school music.

This leads me to speak of the absolute need of a special music teacher who is a trained female singer. Children must learn rote songs by imitating only the best possible examples of singing. The children of the graded schools have almost exclusively soprano voices, and, without injury to their vocal organs, can imitate only the female voice. There is a general opinion that anybody can teach rote singing, though it may require a little musical knowledge to teach sight singing in schools. It is difficult to say which of these opinions has worked the greater harm to our children. No one ever thinks that a medical specialist shall have only a slight training in medicine. The more vital the function of his specialty, the broader the knowledge and preparation demanded of him. Germany requires of her special music teachers pedagogic training, mastery of vocal culture, and the ability to play the piano, organ, or violin. Some day we may hope to have in each school building one teacher thoroughly trained in music. For if our music is to be taught for its ennobling influence on the mind and soul as well as for the pleasure it gives, it must have the very best presentation.

During the last three months the teachers in all grades have shown wonderful enthusiasm, and the results have been correspondingly great. Too much praise can not be bestowed upon them for their hearty cooperation in my effort to give to our music its proper place as a factor in the symmetrical development of our children.

Special thanks are due Miss Jeannette C. Williamson, who, when not engaged in her own school work, has given me most valuable assistance in my primary grades, receiving therefor no remuneration save a pittance from my private purse. Those grades have had no instruction

during the last six months except what she could give them, the work to be accomplished being such as could not be done by my male assistants.

With many thanks for the kindly encouragement of yourself and other officials,

I am, sir, very respectfully,

ALICE STRANGE-DAVIS,
Director of Music.

Mr. G. F. T. COOK,
Superintendent of Public Schools.

DRAWING.

WASHINGTON, D. C., *June 30, 1898.*

DEAR SIR: I deem it unnecessary at this time to enter into details as to subjects and methods employed in this department. The recent exhibition fully demonstrated our desire and effort to develop the course of study prescribed by the board of school trustees.

The exhibition having been reviewed by all of the honorable Commissioners of the District, the chairman and other members of the trustee board, and many prominent educators, both local and visiting members of the National Educational Association, and parents and friends of our pupils, I have only to add my sincere thanks for every kindness extended to me by you and the trustees.

My assistants have filled their positions with ability, integrity, and unity of purpose. The regular teachers have faithfully supplemented the instructions given by the specials. Under such conditions it is obvious that the year was a pleasant and, I trust, a profitable one to all concerned.

The following is the annual report submitted during the year:

Lessons to classes of teachers	25
Lessons to classes of pupils:	
Special classes	226
Normal classes	53
High School	564
Graded schools	3,795
Total	4,638
Visits for supervision	185

Very respectfully,

T. W. HUNSTER, *Director of Drawing.*

Mr. G. F. T. COOK,
Superintendent of Schools.

MANUAL TRAINING.

WASHINGTON, D. C., *June 30, 1898.*

DEAR SIR: The manual-training department of the ninth, tenth, and eleventh divisons has been one of steady growth and success. This growth is principally due to training the child when very young not only to study and think, but also to work with his hands, and thereby make himself generally useful.

In manual education the desired end is the acquirement of skill in the use of tools and materials. The shop exercises have a highly beneficial influence physically. This training develops closeness of observation, accuracy of perception, vividness of the imagination, quickness of eye, facility of hand, and care and judgment in expression. It cultivates a knowledge of relations, of fittingness, and adaptation, all useful in the general duties of life, and which render their possessors either producers, or makes them better able to appreciate the products of labor into which the elements of design enter. We learn to do by doing. As the child first learns the things nearest to him, then those that are farther and farther off, there would seem to be no room to doubt that a systematic course of education, conducted upon this principle, would result in a symmetrical and well-compacted development of his mental and physical being which would fit him for the duties of practical life far more effectively than any one-sided training, however excellent, could possibly do.

The period of school life is, for most children, the formative period. Their tastes, their aptitudes, and their tendencies then take shape and determine very largely the direction of their future career. If during this critical period they learn to look upon labor not only as honorable but as the natural concern of men, they will be better prepared for life's work in later years. In fact, we teach the boys in our public schools that to be a carpenter, a machinist, or a molder is just as honorable, and requires no less skill, and may be more profitable than to be a clerk, doctor, or lawyer.

LESSONS GIVEN IN MANUAL-TRAINING SCHOOL.

Each tool when it is first used is described, the different parts named, and the way to hold and use it is explained. After the boy has learned how to use a tool he is shown how to sharpen it on the oil stone, and is required to keep it in good order, such tools as planes, handsaws, chisels, gouges, brace and bits, hammers, gauges, etc.

We have three rooms devoted to woodwork in Miller Building, the teachers being Messrs. Samuel W. Madden, Algernon L. Cornish, and Henry W. Lewis; one in Stevens, in the charge of Mr. C. H. Madella; one in Randall, with Mr. George Forrester as teacher, and the school at the Lincoln Building is also in charge of Mr. Algernon L. Cornish. Two rooms in the Miller Building are devoted to metal work, and in charge of Messrs. Jeremiah D. Baltimore and Samuel Keys.

In the woodworking shops the course of instruction has been followed by squaring and trimming a piece of lumber 3 inches wide, seven-eighths of an inch thick, and 8 inches long, mortising and tenoning, dovetailing, inlaying, molding by hand, ogee, crown ogee, and nosing.

The lessons included instruction on the nature and use of tools, instruction and practice in shop drawing, elementary work with plane, chisel, saw, different kinds of joints, timber splices, cross joints, mortise and tenon, miter and framework, examples in building, framing roof trusses, making small articles of furniture, and cabinetwork.

TURNING.

A course in wood turning extended through a part of the second, third, and fourth years. The lessons comprised, first, nature and use of lathe and tools, plain and straight turning, caliper work to different diameters and lengths, simple and compound curves, screw plates and chuck work, hollow and spherical turning; second, a variety of whole and split patent core work, giving the pupils practice in forming irregular shapes in wood with lathe and carving tools, as well as familiarity with the nature and use of pattern for molding.

METAL WORK.

The metal department consists of a steam engine and boiler, 6 lathes, 1 planer, 1 shaper, 1 drill press, 1 emory grinder, 1 milling machine, 8 forges, 11 anvils, 11 vises, and the usual number of miscellaneous small tools found in a plant of this kind. The exercises in the forging and machine laboratories consist of the forging of small articles of soft iron and steel and steel tools, with instruction in the simpler methods of manufacture of iron and steel, practice in welding iron and steel, hardening and tempering steel, and in brazing. In the machine department lessons are given in plain and cylindrical turning to various diameters and lengths, taper turning, and the use of the scroll and universal chucks and the face plate; drilling, both in drill press and lathes; screw cutting with lathe, stock, and dies; planing and milling to various forms. In addition to the above we have added to our curriculum steam engineering, foundry work of brass and iron casting. Two pieces of special work have been completed this year, viz: A speed lathe and a force pump.

Masters Thomas Frazier, William Butler, and Everett Brooks, of the engineers' class, having applied for, were granted licenses as engineers, after having been examined by the board of examiners of the District. We regret to lose one of our efficient teachers, Mr. S. Keys, who passed a creditable examination as engineer in the naval department, and sailed on the *Newark* for Spain to aid his country's cause.

During this school year 982 pupils have been taught. Many lectures have been given to all classes, and each pupil has two hours a week in the shop.

The time has come when the manual training department should have a suitable building, and unless this is done the full benefits will not be realized. It is a question of floor space which holds the development in check. More time should be given pupils who attend this department, especially those from the high school. Another shop is needed in the ninth division. I commend the manual training instructors in their work. We are now arranging work for the exhibition to be held July 9 to 13.

Very respectfully,

J. H. HILL, *Director.*

Mr. G. F. T. COOK, *Superintendent.*

COOKING.

WASHINGTON, D. C., *June 30, 1898.*

DEAR SIR: I herewith submit my report for 1897–98:

Randall School, First and I streets SE. (pupils received from Bell, Giddings, Lincoln, and Randall schools. Miss M. E. Ware, teacher):

Number taught	168
Number of seventh-grade classes	6
Number of eighth-grade classes	8
Cost of supplies	$81.35

Stevens School, Twenty-first street, between K and L streets NW. (pupils received from Sumner, Wormley, Briggs, and Stevens schools. Miss H. Johnson, teacher):

Number taught	219
Number of seventh-grade classes	9
Number of eighth-grade classes	6
Cost of supplies	$80.41

School I, 917 P street NW. (pupils received from John F. Cook, Banneker, Jones, Logan, Garnet, Garrison, Patterson, Slater, Sumner, and High School. Miss E. Freeman, teacher):

Number taught	219
Number of seventh-grade classes	7
Number of eighth-grade classes	6
Number of advanced classes	2
Cost of supplies	$89.28

School II, 917 P street NW. (pupils received from John F. Cook, Banneker, Jones, Logan, Garnet, Garrison, Slater, and High School. Miss L. Parker, teacher):

Number taught	181
Number of seventh-grade classes	6
Number of eighth-grade classes	5
Number of advanced classes	1
Cost of supplies	$70.23

The increase in numbers, though small, was pleasing. Just here I beg to suggest that it should be required that all pupils of the seventh and eighth grades attend the cooking schools. There is a tendency in the schools of these grades to excuse some of the pupils from

this study or to crowd the pupils into one or two classes from each school. Whereas this may be an advantage to the regular school, it is certainly an injustice to the teachers and pupils of the cooking schools. In one instance last term we were compelled to receive 24 girls (two classes) in one class. Such an arrangement is greatly to the detriment of the pupil in practice work, and the teacher can not with so many in class obtain satisfactory results and keep the attention of the class. Another kitchen in the ninth division would relieve the crowded classes of Stevens, and one more in the tenth division would lessen the walking distance of pupils from Logan.

The new classes hailed with joy their entrance to our schools. While the first-year or seventh-grade pupils were delighted with the novelty of this branch of school work and were instructed in the fundamental principles underlying the science of cooking and led step by step to discover for themselves various facts concerning their food and its preparation, the second and third years or eighth-grade and High School girls gave more time to the further study of food products, digestion, the making of more difficult experiments demonstrating the different processes of cooking, the proper combination of food for health, and the correct methods of arranging and serving food. We feel encouraged with what was done the past year to raise the standard of our work in several ways.

Past experiences helped us long ago to discern the fact that in many instances the methods we give the pupils are often diametrically opposed to those used in the home. In school the instruction given aims to show how best to cook food to preserve its nutritive principles, yet it has been frequently observed that when food was thus cooked and presented for tasting, it was received without relish and with decided distaste, showing plainly that the taste has been incorrectly developed. This is due largely to the length of time the child has been fed with food deprived of its nutrition by the wrong preparation and highly seasoned with condiments and greasy sauces to satisfy a falsely educated taste. Still we note some improvement. The study of food is becoming more and more interesting to pupils, and we observe that this interest is gradually extending from the school to the home.

The response to our effort to gather the parents to the school kitchens the past term was good and had a beneficial effect toward winning the approval and confidence of the mothers who came, by observing how successfully their daughters performed and explained the experiments given them by the teacher, and we do hope that the day is not far distant when the practical knowledge gained from the cooking schools year after year will so penetrate the homes that all previous defective modes of selecting and preparing the great body fuel-food will be finally effaced.

The class exhibits given by the eighth grade and High School girls during May were quite an improvement on those given in the past, in

that the visitors not only saw the work performed and listened to explanations, but were allowed to sample the same. The teachers and pupils merited the many expressions of commendation which they received. Our needs are many at present, which, when supplied, will aid us greatly in doing better work.

Very respectfully,

MATTIE B. COOK,
Director of Cooking.

Mr. G. F. T. COOK,
Superintendent of Schools.

SEWING DEPARTMENT.

JUNE 30, 1898.

DEAR SIR: I respectfully submit the following report of the sewing department of the ninth, tenth, and eleventh divisions:

Our lessons began September 27. The first week of the opening of school was given to the arranging of programmes and material for classes.

The course for the year has nearly been the same as that of last year, there being little chance to broaden the work, limited, as it is, to four years only. However, in every instance where it was possible to do so, models were reduced in size in order to allow more material and time for new lessons.

The first-year work consisted in drill lessons, stitches, and the drafting and making simple articles, such as bags, bibs, and pillow slips. The number of classes was 37; number of pupils instructed, 821; number of lessons, 1,153; number of models made, 7,518.

The fourth-grade girls were taught seaming, patching, gathering, and adjusting gathers to bands, the straight and bias of cloth, and the drafting and making of gored skirts. Other simple garments were introduced at the discretion of the teacher and when time would permit.

The number of classes receiving instruction was 34; number of pupils, 702; number of lessons, 1,026; number of models made, 5,455.

The fifth-grade pupils took up lessons in advanced patching, darning, gusset setting, hemstitching, napery hemming, buttonholes, and drafting and making drawers. In this grade there were 25 classes; number of pupils receiving instruction, 597; number of lessons, 778; number of models made, 4,524.

In the dressmaking department 196 classes received weekly instruction of an hour and a half each. In all, 500 pupils were enrolled. The drafting of garments, according to the De Lamarton system, together with the fundamental principles of dressmaking, were given. The number of lessons was 1,083; number of models made, 16,124.

The last year of sewing means so much to the pupils, and I notice

they seem to realize it. The fact of its being the last year makes them eager to gain all they possibly can in that time. Frequently they voluntarily remain after class hours to receive extra instruction that will benefit them. While the lessons given are practical, yet the course is necessarily crowded to an extent and too full. The object is to include as much as is possible for the pupil to take in. Some who are especially bright and apt grasp it all, while the dull pupils suffer. We should have at least two years to the course, and I trust that such an addition can be hoped for.

In all of the grade work the study of raw materials and the development of textiles are given in regular lessons. These lessons are of great interest to the pupils. They have a thorough knowledge and appreciation of the tools with which they work and the materials on which they sew. As a means of increasing interest among teachers and aiding them in giving these lessons, I have collected from time to time specimens, 500 in all, which serve as a study and help in this part of the work. These specimens have been collected from all parts of the country, and in many instances have been imported. A box containing specimens of cotton pods is the contribution of one of our fourth-grade pupils, Martha Gray, of Miss Wheeler's school, in the Sumner Building. The seeds were planted by her, and the cotton grown in her garden.

In April the sewing teachers planted cotton seeds in as many of the school yards as the soil would permit. The object is to have the classes see the cotton before picking is done.

On Thursday, December 23, the teachers spent several hours at the museum of the Agricultural Department studying seeds, insects, and raw materials.

In order to bring about a uniformity of methods and results regular teachers' meetings were held during the year, numbering fourteen in all, beginning September 20 to May 26.

In the beginning of the year we found our programmes very crowded, and for a period of four months twenty-three schools received instructions only twice a month. The plan of alternating schools was found to be a better way to reach these schools and derive the best results. Past experiences of doubling classes have not been satisfactory.

Owing to an increase in the teaching force this crowded condition was relieved February 1, and from that time on all classes received regular weekly instruction.

A new method of preparing work was instituted February 1 through the means of additional help. One teacher's programme was so arranged as to give five hours a week to the preparing of models and arranging them into grades and classes. Each month between 2,000 and 3,000 models have to be cut for the third, fourth, and fifth grade classes. This requires a great deal of careful and accurate work, and in order to be economical and prevent the least possible waste the

cloths have to be divided and subdivided into certain size models and according to number of classes and number of pupils in classes.

Heretofore teachers came together one day in each month and prepared this way. While it accomplished one purpose—the preparation of cloth for the classes—yet it caused the following drawback to the schools: Seven teachers prepared the work, and each, having an average of 3 classes a day, the result was that 21 schools were deprived of sewing on that day, or 525 pupils, as each class has an average number of 25.

The teacher detailed to do this work has had a great deal of experience in handling and manipulating cloth, and her services rendered were very satisfactory. This arrangement gave me also more time for supervising and looking after the many details in connection with the work. Very often I have been compelled to prepare extra work by reason of increase in classes rather than detail teachers out of their regular time to do so, and have been thus prevented from supervising work that required my immediate attention. I hope the same method can be adopted another year.

Repeated applications were made to me during the year by young ladies from the High School for admission into the dressmaking schools. In consulting the principal, Dr. W. S. Montgomery, as to the advisableness of such a step, I was encouraged to find him heartily cooperating with such a movement. I hope that such an arrangement can be made to give these young ladies the desired training. It has been my desire for a long while to extend domestic art into our High School. I feel that we should look far ahead and think for those young women, rather than have them suggest to us their needs. In planning out the work I find that some study hour at school can be utilized by those wishing to take a course, and thus the regular recitation schedule would not be interrupted.

I am confident that a thorough course in physiology and hygiene as applied to dress, and practical lessons in home dressmaking, together with artistic designing (if time would permit), would certainly cultivate a strong taste of correct and neat attire, as well as the aesthetic in dress.

In order to extend or broaden any line of work, means best methods, best facilities, and additional and competent help. The department will require such support if my suggestions stand approved.

The popularity of sewing as a part of the public-school course grows each year, and the demand for teachers trained in the work is larger than the supply.

Not only public schools, but charitable institutions, that at one time regarded sewing for utilitarian reasons, find that in order to do better work they also need trained teachers.

The object of the work in domestic art is to take from the start the attitude that sewing is an educational medium, and to consider the best

means of building up the character of the child through doing. In order to secure such help I offer two suggestions, which I hope will seriously be considered:

The appointment of teachers by competitive examination as to their fitness, or by preparing them in the normal school, through a special course of methods, with application in the third grade training schools.

However eager or willing to do teachers without experience may be, their first year's work is necessarily a failure to the pupils as well as a continual embarrassment to themselves, and it is only after a year's struggle that they finally find out how much there is to learn and how much is required of a sewing teacher. Successful results can only be attained by a thoroughly competent teaching force.

The general attendance of teachers was excellent for the year, only 19½ days' absence being caused by sickness. In each case the schools were promptly supplied by the substitute, who has had several years' experience and done proficient work.

I commend to you the ladies associated with me as zealous workers. The yearly standing of their schools prove that they have been faithful in the discharge of their duty.

Among the regular teachers, principals, and supervisors we receive hearty cooperation.

Very respectfully, CARRIE E. SYPHAX,
Director.

Mr. G. F. T. COOK,
Superintendent of Schools.

Statistical report of sewing, 1897–98.

Lessons given to all classes	4,040
Third grade	1,153
Fourth grade	1,026
Fifth grad	778
Sixth grade	0
In shops	1,083
Number of shops	3
Visits for supervision	246
Days teacher absent	19½

Amount of work completed.

Number of models:	
Third grade	7,518
Fourth grade	5,455
Fifth grade	4,524
Dressmaking department	16,124
Total	33,621

Number of pupils instructed.

	Third grade.	Fourth grade.	Fifth grade.	Dress-making department.	Total.
E. M. Thomas	0	0	0	196	196
A. Alexander	132	183	115	0	430
M. G. Lewis	159	124	144	0	427
A. E. Thomas	116	97	69	0	282
M. E. Griffin	36	24	24	156	240
S. A. Goines	48	49	22	154	273
L. A. Hamer	180	110	138	0	428
J. E. Anderson	100	115	85	0	300
Total	771	702	597	506	2,576

PHYSICAL TRAINING.

WASHINGTON, D. C., *June 30, 1898.*

DEAR SIR: I have the honor to submit herewith a report of physical training for the year ending June 30, 1898.

"The body is the organ of the mind; an organ of reception and expression, the medium of countless actions and reactions." It may never be known scientifically what a tremendous influence the body, its organs, every nerve and muscle, vein and artery exert upon the brain and consequently upon the development of the intellectual.

Physical training in the school should counteract the many evil effects of mental strain, the more or less insufficiently ventilated rooms, and prove a valuable agent to the physical development and good health of the pupils.

Nature has wisely implanted a desire for play in children—our work directs and educates this desire through games. Children love to see a purpose before they can put forth their best efforts and they find this purpose in the games.

As our teachers awaken to this connection between strength of body and power of mind, as they see fascination grow on their pupils from the mental element in this training, and observe closer attention and better discipline resulting from daily systematic practice, we find a corresponding increase in the growth of our work from the pupils.

Music is an essential feature in class practice. It insures regularity and uniformity of movement, and gives a spirit to the class not easily induced in any other way. We are indebted to Miss Smallwood for the excellent class of music furnished for our high-school work.

The work in the High School is not sufficiently advanced in complexity and variety, and I would recommend more time and the proper apparatus to meet the demands of these pupils. The only addition here to the work done in graded school is the club work, a greater variety of marching, and the work put to music.

This addition would suffice for one or two years, but does not permit of enough variety for four years' work. Variety is needed to hold attention, arouse interest, and improve discipline.

The Business High School has not had satisfactory work on account of its removal from the main building. We will make such recommendations to you as we find needed here. I think these pupils need to be trained to love plenty of exercise, as it will prove a counter agent to sedentary habits commonly found among business people.

In the graded schools the lesson sheets have been carefully followed since October 1. Prior to this, every school had a lesson on rising, sitting, and standing, which assisted the regular teachers in the early discipline of their schools.

My assistants have faithfully discharged their duties, besides giving extra time and attention to all drill work for building order, concerts, patriotic celebrations, and closing days.

I wish to thank you and the entire corps of teachers for the necessary cooperation during this school year.

Very respectfully,

HATTIE B. GEORGE, *Director.*

Mr. G. F. T. COOK,
Superintendent Public Schools.

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